Harveian Lectures

ON THE

HEART IN ITS RELATION TO PREGNANCY, PARTURITION, AND THE PUERPERAL STATE.

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LECTURE I.

Delivered on Dec. 5th, 1895.

MR. PRESIDENT AND GENTLEMEN,—Before I enter on my pleasant and welcome task to-night I must tender to the President and Council my warmest thanks for the honour which they have conferred upon me in choosing me to fill the post of Harveian Lecturer for 1895. An honour, indeed, it is, for if we look back over the roll-call of Harveian Lecturers we find that the list includes the most learned and most eminent men of our profession. If we study the subjects chosen for these theses we find that many of these lectures stand as landmarks in the development of our knowledge. In 1875 Dr. Sibson, one of the most brilliant and sturdiest of the labourers in the field of medical science, brought before us the great subject of "Bright's Disease and its Treatment considered mainly in relation with Arterial Tension from Blood Contamination." It is an honour in itself to follow such a worker. In 1878 Dr. Hughlings Jackson opened out to us the secrets of "Diagnosis of Diseases of the Nervous System" and gave us the treasures of his master mind. In 1883 Sir William Broadbent made his valuable experience on "Prognosis in Heart Disease" our own, and bequeathed to us a treasure-house of clinical experience. In 1886 you, Sir, delivered your lectures on Cancer of the Uterus, and those writings are now the one recognised clinical teaching of that difficult subject. Again, in 1887 Mr. Jonathan Hutchinson delighted us with his splendid exposition of the Causes and Clinical Characteristics of the Diseases known under the name of Lupus. Anyone who heard those delightful lectures illustrated out of Mr. Hutchinson's vast stores of clinical cases and artistic drawings will allow that he is hard to follow and impossible to beat. To-night I endeavour to follow at a distance in the steps of these great teachers; I thank you for the permission and I realise deeply the honour.

In these days of advanced knowledge it is difficult to bring any subject before a learned society which can claim the charm of novelty, but in choosing the study of the heart in its relation to pregnancy, parturition, and the puerperal state as my theme to-night I have taken a subject which has not yet received an exhaustive study, and yet one to which for some years I have given much thought and observation. If my memory serves me well, the first paper I read before any medical society was delivered before the Harveian Society, and its subject-matter was Sudden Death from Heart Failure in Pregnancy, Parturition, and the Puerperal State; I may claim therefore—fairly, I think—that I am dealing with a subject to which, while gladly culling other men's sheaves, I have endeavoured also to add my own gleanings. Before proceeding to clinical study it will be interesting to review briefly the literature of the subject and watch the gradual progress of our knowledge.

Since the year 1828, when M. Larcher brought forward, through his friend and colleague, Dr. Ménière,[1] the result of his work in the Maternity Hospital of Paris, and placed the fact of cardiac hypertrophy in pregnancy on a firm scientific basis, much has been said and written on this important subject. Naturally a fact of so great moment was not allowed to pass unchallenged, and as early as 1833 M. Rochoux[2] protested, though without sufficient ground, against the truth of the assertion. At a later date Lohlein,[3] though admitting the existence of the hypertrophy, endeavoured to show that the estimate had been considerably overdrawn and clearly thought that M. Larcher had exaggerated the effects of the hypertrophied heart in connexion with pregnancy. It will be interesting to consider for a few moments the methods or lines of investigation on which the truth of the existence of this hypertrophy was proved. M. Blot examined the hearts of twenty women who had died during delivery; having carefully emptied these hearts of all blood and clot, he weighed them and found the average weight to be 291·95 grammes. On comparing this with the average weight of the healthy heart in the adult female, a weight that varies from 220 to 230 grammes, very considerable increase was at once manifest. This method, however, while proving incontestably the fact of increased cardiac weight in pregnancy, treated the heart in its entirety and gave no information relative to its component parts. Here, on the other hand, the careful measurements of MM. Larcher and Ducrest[4] come in and fill the gap; both these authors measured with the most rigorous care the thickness of various parts of the heart-wall in over a hundred cases of women who had died during or soon after delivery; both came to the same conclusion—namely, that there was no evident increase of thickness in the wall of either right or left auricle, or in that of the right ventricle, but that the left ventricle was considerably hypertrophied. According to M. Larcher the thickness of the wall of the left ventricle was increased from a quarter at the minimum calculation to a third in cases of maximum hypertrophy. Ducrest, measuring in each case at the thickest part of the left ventricle, and taking the normal measurement given by M. Bigot[5] as his standard—viz., 0·010 m.—found the thickness to vary in puerperal subjects from 0·011 m. to 0·022 m., giving thus an average of 0·015 m., or an increase of 0·005 m. Both the above methods are, of course, only applicable in cases in which a post-mortem examination has been available, and are of course useless, for that reason, in cases where we may wish to establish the presence or absence of hypertrophy of the left ventricle during life. In comparatively late times Duroziez[6] sought by very careful percussion of the præcordial area to establish the fact of the presence of hypertrophy. Having made an exhaustive examination of 135 women, he came to the following conclusions: "1. The hypertrophy of the heart in the puerperal state is demonstrable; the heart does enlarge during the pregnancy. 2. During the first day after delivery the left cavities of the heart diminish in size, the right cavities remain enlarged. 3. At the time when the secretion of the milk begins, about the third day of the lying-in period, the heart is lengthened. The heart remains during lactation enlarged, but becomes small if the woman does not suckle. 4. In women who have frequently borne children the heart is larger than in such as have only been delivered once or twice." As to the possibility of obtaining such accurate results by percussion I do not propose to argue. Fritsch has questioned them on the ground that the presence of the enlarged female breast would be an insuperable obstacle, but I fail to see why the methods should not be applicable if suitable cases are chosen.

The last series of observations refers to the possibility of diagnosing cardiac hypertrophy from the presence of certain bruits heard over the cardiac region in pregnant women. As early as 1837 MM. Jacquemier and Moreau had drawn attention to these murmurs and stated: "The *bruit de soufflet* of the præcordial region in pregnant women appears to admit of the same explanation as that given for plethora; it is, on the one hand, the too great quantity of blood, the predominance of fibrine; on the other, the cavities of the heart being momentarily too small, and their increase of energy for moving the greater mass of the blood, which determines the alteration of the first sound; the persistence of the same sound in some newly-confined women seems to recognise the same cause. It is evidently the state of the blood, the plethora, which in pregnancy is the cause of the *bruit de soufflet*." In M. Larcher's writings we find the

[1] Archives Générales de Médecine, vol. xvi., p. 469.

[2] Dictionnaire de Médecine, vol. iii., p. 504.

[3] Zeitschrift für Geburtshülfe, 1876.

[4] Archives Générales de Médecine, 1859, cinquième série, tome xiii., p. 291.

[5] Mémoires de la Société Médicale d'Observation.

[6] Gazette des Hôpitaux, No. 104.

statement: "This *bruit de soufflet* implies, as has been already said, the hypertrophy of the organ which produces it; in consequence the fact of the presence of these murmurs establishes the existence of our law of cardiac hypertrophy in pregnancy; again and again we have observed the constant relation which exists in pregnancy between the *bruit de soufflet* recognised by auscultation at the præcordial region and the hypertrophic state of the left ventricle always found at the necropsy." M. Beau[7] also writing in 1846, says in his Memoir on Arterial Sounds: "The fact of left ventricle hypertrophy as observed by M. Larcher has nothing about it which ought to cause us astonishment when we consider that we have always hitherto shown that arterial sounds suppose always dilatation of the heart joined to a hypertrophy more or less notable." In addition to proofs already adduced modification in the pitch and intensity of the cardiac sounds might fairly be adduced here, but, as this point has been but slightly touched upon, it is, perhaps, scarcely needful to expatiate upon it now. With regard to the *bruit de soufflet* recognised by M. Larcher, M. Beau, and others, and considered by them to be a nearly constant concomitant and index of left ventricle hypertrophy, I should like to record a contrary experience. In about fifty multiparæ examined by myself during the seventh and eighth months I have heard this bruit only some five or six times. I have not included in this number women in whom anæmia is markedly present, but have limited my observations to strong, healthy mothers, in whom one might reasonably expect hæmic bruits to be absent. That a bruit is *occasionally* present in cases of pure left ventricle hypertrophy I do not wish for a moment to deny. Walsh[8] says on this point: "Systolic blowing murmur, basic and audible at the second right cartilage, is *sometimes* heard in cases of pure hypertrophy; nor can it be positively ascribed in all cases to co-existent spanæmia. I have known such a murmur disappear when the heart had become comparatively quiescent by treatment of a kind depressing rather than otherwise, and wholly non-ferruginous. Hence excess of force of propulsion of naturally constituted blood would seem capable of generating direct murmur. Again, hypertrophy may possibly during the excitement of palpitation induce mitral regurgitant murmur by disturbing the action of the papillary muscles; such murmur actually does, as a clinical fact, exist at one time and disappear at others. Systolic basic murmur may also, very probably, be generated in cases of dilated hypertrophy in consequence of the altered relationship of the aortic orifice to the cavity of the ventricle—altered both in point of size and of direction of the blood current." I think the necessary inference, from what has already been said, must be that a bruit dependent on left ventricle hypertrophy will (if due precaution be taken during examination of the heart) occur but very rarely. Dr. Angel Money[9] has pointed out in a paper read before the Royal Medical and Chirurgical Society the great frequency of cardiac murmurs in the puerperal state, and questions their relative constancy during the pregnant period. Dr. Macdonald sums up the evidence for and against the existence of the hypertrophy of the heart in pregnancy so ably and so fairly that I shall quote his remarks *in extenso*. He says: "Notwithstanding what has been argued to the contrary, I cannot help feeling that there is a certain amount of such hypertrophy. My reasons are the following: 1. I cannot conceive so many honest observers as have examined such large numbers of the hearts of women dying during the childbed period to have been completely mistaken in a matter of the kind, though they may have been so in regard to the amount of the increase of size. There is great liability to error in this direction, in consequence of the great difficulty involved in determining a reliable average for the normal heart. 2. I think it can be shown that, though they have erred in using tables that somewhat under-estimated the normal heart in respect both to weight and thickness, and consequently were led to make the difference appear greater than it should be, there still remains even after such reduction is made a substantial difference in favour of their views. (*a*) Thus in regard to the average thickness of the left ventricle in pregnant and non-pregnant women Ducrest states the average thickness at the thickest part of the wall of the left ventricle in the puerperal woman at 1·5 cm. Bizot gives in the same cavity the average thickness for women generally as 1 cm.; Peacock, again, makes the average thickness of the left ventricle in women generally at the base 1·102 cm., at apex 0·526 cm., at mid-point 1·26 cm. It will thus appear that, granting that Bizot's averages are too low, and assuming Peacock's, as being the later, to be the more correct, there is still a margin of 0·24 cm. in favour of the truth of Ducrest's observations. (*b*) If, then, we take and compare the weights as given by Blot and by Peacock respectively, we find that Blot's average in the puerperal condition is 9 oz. 38 gr. troy. Peacock gives the general average of healthy hearts in females that have died from twenty to fifty-five years of age as 8 oz. 15·5 gr. troy. In the cases of those who died of acute diseases the averages varied from 7 oz. 140 gr. troy to 9 oz. 55 gr. troy, whilst of those who died of chronic diseases the average varied from 6 oz. 182·5 gr. troy to 8 oz. 117 gr. troy. (*c*) Macdonald gives the results of three hearts which he himself examined. He states that in two of these the heart was markedly enlarged, and the left ventricle decidedly hypertrophied. (*d*) A certain amount of cardiac hypertrophy is not only rendered probable by the existence of greater work for the heart to perform during pregnancy, but has analogies in many similar changes that occur during pregnancy in other organs."

Since studying the changes which occur in the heart in connexion with pregnancy I have had the opportunity of carefully examining the hearts of three women who had died suddenly during the course of labour or childbed.

CASE 1.—This was the case of a healthy woman aged forty, in labour with her fifth child; towards the end of the second stage the uterus ruptured, and death ensued before assistance could be rendered. The heart was markedly enlarged and the wall of the left ventricle considerably hypertrophied; the hypertrophy amounted to nearly a third above the normal thickness. The measurement was taken at the point of maximum thickness of the left ventricle.

CASE 2.—A healthy woman aged thirty-five died on the third day after delivery from the sudden rupture of an abscess in the right ovary. Here the heart was large, and distinct increase in the thickness of the wall of the left ventricle was present, though the hypertrophy was not so pronounced as in the previous case.

CASE 3.—This was the case of a feeble, under-sized woman aged thirty-eight; severe ante-partum hæmorrhage occurred in her third pregnancy within a week of full term. Death took place the day after delivery from cardiac failure. Here no marked enlargement or hypertrophy of left ventricle could be detected.

Dr. John Phillips, in the *Practitioner* for June, 1895, quotes two cases in which he observed the cardiac condition after death, this occurring in one case from rupture of the uterus during labour, and in the other from suicide during the seventh month of pregnancy. Clearly this last case is not so suitable for study, owing to the early stage of the pregnancy. In neither case was there evidence of hypertrophy of the left ventricle, though in both cases the weight of the organ was slightly above the average. The evidence seems to point to the fact that, though occasionally left ventricular hypertrophy may not be very pronounced at the end of pregnancy, especially in feeble or poorly developed women, yet in the vast majority of healthy subjects this increase in thickness of the wall of the left ventricle is always present. Dr. Phillips[10] says: "During pregnancy the work of the heart is augmented, owing to the larger quantity of blood and the increased resistance in its circulation. During the later months this task is added to, in consequence of the decreased power of expansion of the thorax and the compression of the large abdominal veins by the pregnant uterus. In spite of the additional work a healthy heart is possessed of so much reserve force that hypertrophy is unnecessary." Where, however, is the proof of the existence of this reserve force? Dr. William Collier, in a most valuable paper read before the Medical Society of London in November, 1892, points out the constant effect of increased strain on the heart in healthy and hardy men in bringing about hypertrophy and disease of the organ. Dr. Clifford Allbutt, in the St. George's Hospital Reports for 1870, published a paper drawing attention to the effects of overwork and strain on the heart and great bloodvessels, and showed that constant strain thrown on the hearts of men first produced dilatation of the chambers, followed by hypertrophy of their muscular walls. In badly fed and badly

[7] Archives Générales de Médecine, quatrième série, vol. x., p. 28.
[8] Diseases of the Heart, third edition, p. 283.
[9] Transactions of the Royal Medical and Chirurgical Society, vol. lxv., p. 87.
[10] Loc. cit.

developed men dilatation was the most pronounced change and often led to valvular incompetence early in the day; more frequently, however, dilatation was accompanied by hypertrophy, and for a time all went well. It is important to note, as Dr. Clifford Allbutt expressly states, that these changes were as a rule very gradual, and that the symptoms induced were not sufficiently marked to make the sufferers seek medical aid until considerable periods had elapsed. Apparently the same kind of changes are brought about in the lower animals by precisely the same causes, for hypertrophy of the heart occurs with especial frequency in racehorses, hunters, greyhounds, and foxhounds. At death the heart of the celebrated greyhound, Master McGrath, was found to be enormously hypertrophied; and Mr. Fleming records the fact that the heart of the celebrated racehorse, Helenus, weighed 15½ lb., instead of about 9 lb., the normal weight. Facts like these contradict the idea that the heart is possessed of a reserve force which renders hypertrophy unnecessary, but strongly support the view that extra work implies compensatory development and place the theory of cardiac hypertrophy in normal pregnancy out of the region of reasonable doubt.

For some time I have endeavoured to obtain confirmatory evidence by watching the effect of rapidly growing abdominal tumours on the heart. Of course, in these cases the presence of malnutrition owing to the parasite life of the tumour has to be taken into account, and heart weakness from this cause must be allowed for. My observations are not yet sufficiently numerous to allow me to speak with absolute certainty, but I have noted the following facts. In patients in whom abdominal tumours (of a size to reach nearly up to the xiphoid cartilage) have been removed, and examination of the chest has been made within a month after the operation, the heart's apex may often be found displaced downwards and outwards and the area of cardiac dulness increased. Again, in elderly women, should an abdominal tumour grow rapidly, heart failure may be a prominent symptom at an early date, as the advanced age of the patient renders the development of compensatory hypertrophy to meet the rapidly increasing work less probable. The following case illustrates this point rather happily.

A sparely built woman aged sixty-six was admitted into the New Boynton Ward, St. Mary's Hospital, under my care. Her history was as follows. Her general health had always been good, but for the last three years she had been conscious that her abdomen had been considerably larger. As, however, her general health remained fairly good and she was not materially inconvenienced by her increase in size, she did not seek medical relief. During the last three or four months, however, her abdomen had enlarged very rapidly; she had suffered from breathlessness and palpitation, her legs had been swollen, and she could not lie down at night. On admission her condition was as follows. The abdomen was distended by a tumour which reached up half-way between the umbilicus and ensiform cartilage; there was free ascitic fluid in the peritoneal cavity; the abdominal walls were intensely œdematous; the legs were enormously distended by dropsical fluid. The heart was acting feebly and irregularly, and a soft systolic murmur was audible at the apex; the heart sounds were very feeble, and the pulse-rate was 140 to 160 per minute. The condition was so critical that I performed ovariotomy with as little delay as possible. After the operation the improvement was rapid and most striking. The pulse-rate within forty-eight hours had fallen to 120; the œdema very rapidly cleared up, and by the end of ten days the pulse-rate was only 88, regular, and of fair force, while all trace of dropsical effusion had disappeared and the patient was able to lie down and breathe comfortably. The heart sounds soon became clear, and the murmur previously heard disappeared.

As an example of the first fact referred to I may quote the case of a young woman aged twenty-nine, who is now in the New Boynton Ward at St. Mary's Hospital. I have watched her case during the last five years. She was sent to me because of a fibroid tumour which reached up above the pubes, nearly to the level of the umbilicus. Six months ago the tumour began to grow rapidly, and a fortnight ago I was obliged to remove the mass. Palpitation and dyspnœa have subsided since the performance of the hysterectomy, but at the present time the heart's apex is in the upper part of the sixth intercostal space and reaches outwards to the vertical nipple line. There is nothing in the patient's history to account for the cardiac hypertrophy save the long-continued presence of the fibroid tumour and the effect of the growth on the heart. A condition of high arterial tension is in itself an argument in favour of the existence of hypertrophy of the left ventricle, and of the presence of this exalted tension I think there can be no reasonable doubt. Both at St. Mary's Hospital and at the British Lying-in Hospital I have made numerous observations with the sphygmograph to ascertain, as far as possible, the absence or presence of evidence of increased arterial tension in women advanced to nearly the full term of pregnancy, and in all instances in which the patient has been a strong, healthy woman have found it present. Occasionally in feeble anæmic women the sphygmographic tracing has been wanting in evidence, but this is nothing more than one would expect. Macdonald and other observers have argued that not only is hypertrophy of the left ventricle present, but also that, more or less, dilatation of the auricles and right ventricle is existent. The former points out that as the amount of blood circulating within the mother's vessels during the latter months of pregnancy is increased beyond question the same must be true of the amount circulating in the heart within a given period of time, since the heart is only a section of the general vascular system, unless it could be shown that the heart beats more quickly during the latter months of pregnancy than at other times. But the latter is not the fact, therefore it follows that at each contraction of the heart a larger amount than normal must be propelled from the ventricles, and at each diastole a larger amount must find its way to these cavities. And the same must be true of the auricles. It follows, therefore, that all the chambers of the heart must be somewhat dilated during the last months of pregnancy, though it would appear that the increase of muscular tissue is very greatly restricted to the left ventricle. Hence there is reason to believe that in the left ventricle, during pregnancy, we have as a physiological condition a certain degree of increase in its capacity, associated with a variable amount of muscular hypertrophy in its walls; and in the other chambers we have the same slight dilatation, uncompensated by muscular hypertrophy. That dilatation is present as well as hypertrophy might be suspected from the outward displacement of the apex of the heart during the latter months of pregnancy. Towards the end of the sixth month, when the upward pressure on the diaphragm is hardly sufficient to lead to much dislocation of the heart's apex, I have often noted that the apex-beat may be found, if not exactly in the vertical nipple line, yet at all events closely approximated to this line, and it is difficult to avoid the conclusion that this change of position depends principally on the presence of dilatation.

What is the condition of the heart after delivery? In the first place it is clear that a great strain is laid upon the heart during labour from sheer muscular exertion, and the heart muscle must be left in a somewhat tired and exhausted condition. Again, the emotional effects of excitement, and possibly fear, must tell unfavourably on the nervous supply of the organ. In addition to the above causes there are other special difficulties which the heart has to encounter. Thus during the contractions of the uterus the circulation through the womb is impeded, and the blood-pressure rises in the mother's vessels, thus throwing a greater strain on to the heart and calling forth the exercise of greater pumping-power. Also, in the second stage of labour the long expiratory efforts of the thorax lead to interference with the return of venous blood into the right heart, as is shown by the congested condition of the face and fulness in the veins of the neck. Spiegelberg, in his valuable paper published in 1871, called attention to certain cardiac conditions following delivery. He believed that he had found a key to the explanation of many cardiac troubles arising after labour in the existence of suddenly diminished arterial pressure and increased venous pressure. He says: "These unfortunate accidents are rather conditioned by this, that the degree of the compensation of the cardiac lesion, being under ordinary circumstances enough to make the situation tolerable, is no longer sufficient for the altered, and especially for the suddenly altered, relations of pressure. With the expulsion of the child and its membranes these relations of pressure are suddenly changed, the placental circulation is eliminated, the numerous and wide utero-placental vessels are shut, and the pressure in the aorta sinks; this results still further for the reason that, whilst the channels have in part (in the uterus) become impassable, the mass of blood is still relatively increased, for the hæmorrhage during the labour in normal cases is not so copious as to reduce the previously

existing increased mass of blood immediately to the non-puerperal standard. In consequence of the increased pressure arising in this manner in the veins, to which is added the greater mobility of the diaphragm, acting in the same direction, brought about by the emptying of the uterus, the blood after delivery flows more copiously into the thoracic cavity and to the lungs; the work for the right heart increases." We can easily understand that these changes of pressure, quickly overcome and equalised by a sound heart, may act very injuriously upon an organ which has been in any degree weakened. Fritsch also believes that the sudden troubles which arise from heart disease during childbed are due to the defective cardiac compensation being unable to meet the conditions introduced by the suddenly altered relative pressure, although he disagrees with Spiegelberg as to the manner in which it acts. Fritsch lays down that a certain amount of cardiac dilatation exists to meet the requirements of a greater amount of blood circulating in the heart during pregnancy at each beat. This dilatation, he argues, must involve both sides of the heart. The healthy heart is able to meet these extra requirements, but a diseased or feeble organ suffers from imperfect power of accommodation to these demands upon it, and as the pregnancy advances the effects of this defective power of accommodation increase. After labour Fritsch believes that the great amount of blood squeezed out of the uterus finds easy accommodation in the enormous abdominal venous plexuses and in the expansible capillary plexuses of the peritoneum and broad ligaments. This it readily does, as the abdominal pressure after labour, though it need not be negative, is nevertheless much diminished. Provided the heart is healthy, all is soon restored to order. But, suppose the heart is too dilated in connexion with disease involving it, too little blood flows into it, it contracts strikingly irregularly, too little reaches the smaller circulation, and the blood throughout the body is defectively oxygenated. Vital force sinks in consequence, the ill-nourished cardiac muscle loses its force, and thus is established a vicious circle of the most dangerous kind. The risk, manifestly, must be greater in dilated hearts, yet well-compensated hearts may overcome the period of violence and pressure from the labour; but in anæmic and weakened patients, possibly during the pregnancy, the deterioration may be so important that the labour is either the end or the beginning of the end. Lebert holds that pregnancy and parturition are very liable to operate injuriously not only upon the valves of the heart but also upon its *muscular* tissue. This view is worthy of special consideration and is supported by many clinical and pathological facts. Ollivier[11] mentions a curious fact observed by himself—viz., that in some cases the hypertrophy started during pregnancy seems to undergo increased development after labour, and mentions a case in which marked hypertrophy of the cardiac muscle was present and gave rise to troublesome symptoms for a year or more after the pregnancy had been terminated. The case is so interesting that I venture to record it in detail.

A woman aged thirty-eight, of robust appearance, came complaining of dyspnœa and palpitations. The face was flushed without being cyanosed; respiration was frequent, but there was no cough or expectoration. The lungs were quite healthy. The apex-beat of the heart was in the sixth space, two centimetres outside the vertical nipple line; the impulse was strong and felt over a wide area. Cardiac dulness was much increased. On auscultation no pericardial friction or endocardial *souffle* was heard, but the valvular sounds were high-pitched and of a metallic note. The antecedent history of the patient was good, and there was nothing to account for the hypertrophy except pregnancy; alcoholism, emotion, previous cardiac disease—all were carefully excluded. Married at the age of twenty-eight, the patient had had two children in the first three years of her married life, and since that time she had always suffered, though previously she had enjoyed sound health. Towards the seventh month of her second pregnancy she commenced to complain of palpitation. Delivery was natural, but the palpitations continued, and any slight exertion made them much worse. By degrees respiratory troubles appeared in addition to the palpitation, and now they formed together a source of constant trouble. Six months later no change had taken place in the symptoms. There can be no doubt that the normal hypertrophy of pregnancy was in this case carried on to a morbid amount, and, as may happen in the uterus, involution was interfered with, and hyperplasia resulted.

In considering the condition of the heart after delivery there is another point, which has met with little, if any, consideration. We have seen that most authors are agreed that considerable hypertrophy of the heart does take place during pregnancy in order to meet the increasing strain thrown on to that organ, but nothing has been said of any shrinkage or diminution of this compensatory development after labour is over; yet, judging from the analogy of the uterine muscle and from the relation of development to work demanded, there should exist some retrograde changes in the cardiac muscle. Broërs, writing in *Virchow's Archiv*[12] on the involution of the uterus after labour, states that as the result of experiments he finds that the first cause of diminution in volume of the muscle cells is a discharge of glycogen from the hypertrophied muscular fibres; at the same time the œdematous inter-muscular connective tissue parts with much of its water through absorption. For the first few hours these changes alone constitute involution. The muscular coats of the arteries share in the loss of glycogen. At the end of the first day true fatty degeneration can be detected in the muscle cells. After a few days this well-known process alone finishes the involution, no more glycogen being excreted. It is impossible to escape the questions, Does a similar fatty change take place in the cardiac muscle after the termination of pregnancy? Is the fatty degeneration ever carried on to a harmful extent, thereby leading to a dangerous weakening of the heart's power? And, thirdly, is this theory purely hypothetical, or is there clinical or post-mortem evidence which can be brought forward in support of it? We shall return to a study of these points before long.

We have so far studied the changes which take place in the heart during a normal pregnancy, and we have also briefly reviewed the condition of the heart after delivery. We are now in a position to study some of the bearings of these changes on the condition of the heart during pregnancy and labour, and also the influence of cardiac changes on the heart after delivery. At present we are not specially concerned with the influence of "valvular" disease of the heart on pregnancy, parturition, or the puerperal states. Indeed, we see that in the majority of instances patients with valvular disease of the heart pass through pregnancy, labour, and the lying-in period quite as satisfactorily as patients who have sound valves to their hearts. In one case, of which I have notes, the patient, a young woman aged about twenty-five, who had suffered from diseased mitral valves since childhood, noticed through three pregnancies that she was always better and had less palpitation and cardiac trouble when "carrying" her child than at any other time. In her case the cardiac hypertrophy of pregnancy seemed to exercise a distinctly beneficial effect. It is undoubtedly true that pregnancy comes as a formidable complication in cases in which endocarditis has *recently* existed, for the increased strain thrown upon the heart is very prone to lead to a recurrence of the endocardiac inflammation, and puerperal endocarditis seems to have a special tendency to become distinctly ulcerative. Macdonald allows that inflammatory action in the endocardium, if it is not septic in origin, is far more liable to attack cases of heart disease which are of a comparatively recent origin than those which are of long standing. In these latter, he says, "disturbances of compensation appear to me to be the evils of which one has most to stand in dread." Of course when valvular disease exists and compensatory hypertrophy is imperfect or barely sufficient for the requirements of the vascular system pregnancy does introduce additional danger, but the same danger of heart failure may exist when the valves are sound. Macdonald states that the evils likely to arise from pregnancy in connexion with cardiac valvular lesions are referable to two classes:—1. Destruction of that equilibrium of the circulation in heart disease which has been established by compensatory arrangements. This result seems to be intimately associated with the high vascular tension and coincident hypertrophy of the left heart present during the latter months of pregnancy. He should have said: "occasional absence of the coincident hypertrophy of the left heart present during the latter months of pregnancy." 2. Introduction of fresh inflammatory lesions upon the valves and endocardium of a heart already weakened by disease—or, in other words, by *recent* endocarditis.

[11] Maladies Chroniques d'Origine Puerpérale.

[12] Vol. cxli., part i., July, 1895.

He goes on to say that pregnancy is apt to act injuriously, not only upon the valvular arrangements of the heart, but even upon the muscular tissue of the heart itself. The second evil, from the very nature of things, must occur so very infrequently that practically disorders of compensation, and, secondly, degeneration of the muscular tissue of the heart, are the two evils with which we have to deal. If we ask what is the nature of this degeneration of the muscular tissue of the heart I think that we are bound to regard it as "fatty" in nature. Putting aside the fact that in cases in which the abdomen has been occupied for some time by large tumours (such as ovarian and fibroid growths) there is often found a fatty degeneration of the large organs—due, it may be, to interference with the diaphragm and defective oxygenation of the blood in the pulmonary circulation—we still have to consider the question of retrograde changes in the heart after labour or towards the close of pregnancy. It is generally allowed that, granted that the left ventricle does undergo hypertrophy during pregnancy, the latter condition is not a permanent one, and within a longer or shorter time after delivery the ventricle returns to its normal thickness and size. Reference has been made already to the conclusions arrived at by Duroziez—viz. (1) that the heart remains enlarged during lactation, but becomes small if the woman does not nurse her child; and (2) that in women who have frequently borne children the heart is larger than in such as have only given birth once or twice. This last conclusion suggests the probability that the heart, though shrinking after delivery, does, like the uterus, never completely regain its previous proportions. There is, then, a close sympathy between the heart and the uterus; when the latter enlarges, so does the former, and when the uterus reverts to its usual size the heart has a tendency to follow suit. This coincidence does not necessarily imply a *post hoc* and *propter hoc* tie between uterus and heart, but it suggests that the wave of formative energy which sets in and has its starting-point in the stimulus of conception affects equally heart and womb. Granted, however, the fact of cardiac hypertrophy in pregnancy, and that of the heart's return after delivery to its former size—a return which Ollivier in his "Étude sur les Maladies Chroniques d'Origine Puerpérale" states to be very rapid and to leave no trace behind—how does this return take place? Is it, as in the case of the uterus, by a process of fatty retrograde change with removal of the waste products? And does the process of reversion ever go on to an excessive degree, as sometimes happens in the case of the uterus? Again, is the process of cardiac involution ever premature? Does it under certain circumstances, which are conceivable, set in, like placental degeneration, before the objects for which the growth has been called into existence have been fulfilled? That the cardiac muscle may undergo temporarily a process of fatty degeneration and become restored again to a healthy and normal state is well known to us; it occurs again and again in cases of fevers such as typhoid fever and typhus fever. In looking over the writings of authors who have studied the question of sudden death during and after pregnancy numerous cases are found to be recorded where fatty degeneration of the heart was observed at the post-mortem examination, and very little else; few deny that this may be a cause of sudden death, but the majority do not give it a prominent place. M. Ambroise Mordret writes: "As for the fatty state of the heart, it is a circumstance I have many times noted"; but he goes on to add: "At the same time I do not see how to admit any relation between fatty degeneration of the heart and the puerperal state; the puerperal state may offer some mechanical obstruction to the circulation, but that is all, and effort may determine a rupture." May we not then fairly assume that in the majority of cases the hypertrophied muscular fibres of the left ventricle do soon after delivery (and in some cases even earlier) undergo a process of retrograde metamorphosis, and that this change is fatty in nature? In the case of women whose constitution is sound, and in whom the vascular and nervous systems are well-balanced, the process of decay and reconstruction goes on with well-adjusted steps, the cardiac power is not unduly weakened, and no morbid symptoms result; but with those in whom any vice of nutrition dwells, or in whom the wheels of their chemical processes are apt to become clogged, serious results may ensue; the heart tissues may become weakened and overcharged with fat, and only a slight addition of emotion, shock, or muscular strain is needed to tax the weakened organ past its powers of endurance.

I should like here to call attention to what seems to me to be a very important fact whilst dwelling on this subject of fatty change; there is no difficulty in recognising at a post-mortem examination *advanced* fatty degeneration of the heart—the faded-leaf hue of the quondam muscular tissue, the weakened resistance to pressure with the finger, and the exudation of oil under pressure are all diagnostic; but it is different in a case in which the fatty process is less advanced and the presence of the change may be easily overlooked. I have frequently seen a heart pronounced to be healthy at a necropsy, and yet, when the tissue has been submitted to microscopic examination later, the presence of well-marked degeneration of the muscular tissue and fatty metamorphosis has been well seen.

An Address
ON
PROFESSIONAL UNIONISM.

Delivered before the South-West London Medical Society on Jan. 8th, 1896.

By W. G. DICKINSON, L.R.C.P. LOND., M.R.C.S. ENG., D.P.H.

MR. PRESIDENT AND GENTLEMEN,—I need hardly apologise for bringing forward this subject. Having undertaken to open a discussion on some ethical question at this meeting, it seemed to me only natural to choose one to which almost every issue of the medical journals for the last twelve months and more has contained some reference. Sometimes these references have been anything but encouraging. The *Times* went out of its way during the last annual meeting of the British Medical Association to warn the profession against anything like trades-unionism. The *Practitioner* took the same line, described our grievances as "sentimental," and alluded to the discussions of these "well-meaning, but tedious gentlemen." But the weekly journals more in touch with the profession have taken a truer view, and have freely recognised the need which exists for united action. I will only refer you to the papers and discussions in the Ethical Section at the last annual meeting of the British Medical Association, and to the recent excellent series of articles in THE LANCET, headed "The Battle of the Clubs," as showing the amount of importance now attached by medical men all over the country to union amongst themselves for defensive purposes. In a leading article a few weeks ago THE LANCET[1] said: "There is a general feeling throughout the profession in favour of a more strict enforcement of the principles and duties of medical ethics. The profession is crowded as it never has been before, and the temptation to resort to undignified and unprofessional methods is greater than it has ever been; but the general antipathy of medical men towards such methods continues and is likely to continue." It then proceeded to urge medical men to organise in every district and to use their local authority in a dignified manner for the assertion of their rights, and in condemnation of those who are willing to betray the general interests of the profession if they can thereby gain a personal advantage.

The first point which I wish to raise in order to clear the way is, What do we mean by unionism in the profession? I will then ask you to discuss its principles and objects, and the methods by which the latter may be attained. I may say at once that in my opinion our unionism ought to differ very widely from trades-unionism. No one in these days disputes the right of any class in the community to combine for the promotion of its own interests. Whether such combinations, when they interfere with the natural working of the laws of supply and demand, are advantageous to the class concerned I consider more than doubtful, but this is beyond the scope of our discussion. Whatever opinions may be held as to the theory of trades-unionism and its application to the present circumstances in our profession, I, for one, disclaim all sympathy with its

[1] THE LANCET, Nov. 9th, 1895.

methods. I trust that we shall never countenance the interference with individual freedom, the grinding tyranny, and the class-selfishness which characterise so many modern trade movements. According to Mr. Sidney Webb, "a trades-union is a continuous association of wage-earners for the purpose of maintaining or improving the conditions of their existence"; this sounds harmless enough, and if we call a professional union "a continuous association of professional men for the purpose of maintaining or improving the conditions of their existence" I think that no objection can reasonably be taken to the definition, or to the object thus stated—least of all by the wage-earning class, who, from their mere numbers, must always make the greatest demands upon us. It should be borne in mind that in our case the usual conditions are reversed; we—the numerically few—are the employed (and often the unemployed), while the public—the many—are the employers. It is not proposed that we should attempt to coerce the public, our employers, by strikes or any similar means, but rather that they should share with us the advantages of organisation resulting in improved remuneration and raised status which will accrue to us as a class if our efforts are successful. I consider that our unionism should depend for its success upon moral rather than physical forces, and that we should treat those of our own body who may differ from us as gentlemen, instead of stigmatising them as "blacklegs." Let those of us who have given up material advantages for the benefit of our professional brethren, and from no other motive, come forward and throw the first stone at men who have been forced by stern necessity into undesirable ways. I do not by this mean that these men should be encouraged—quite the contrary; every effort should be made to deter them from sacrificing the honour of their profession, and in those cases, which must unfortunately exist, in which remonstrances have no effect our only alternative is to leave them severely alone. With regard to those who, although in good general practice and of high professional status, deliberately sell themselves and their fellow-practitioners into lay bondage, it should be the duty of the local union to tell these gentlemen in unmistakable terms what is thought of their conduct. No man is altogether insensitive to the opinion of his fellows, and the better his position the more sensitive he is; the amount of moral pressure, therefore, which can be brought to bear by a society such as ours, which includes the great majority of the local practitioners, must necessarily be very great.

This brings me to the principles upon which all professional unions should be founded. In the first place, there should be no exclusiveness about them; they should be open to all, and endeavours should be made to induce all to join them. What we should aim at is to bring home to the mind of every practitioner, high and low, that the interests of the profession are his interests, and that anything done to damage these interests either by himself or others in the long run injures him, whatever immediate profit may be gained thereby. In the second place no limitations should be placed on individual freedom of action, unless this should be in violation of the recognised principles of medical ethics, which should be at all costs upheld. Thirdly, we ought to remember that the profession exists for the benefit of the public, and that therefore, however much we may refuse to be dictated to by lay organisations, we must be careful that the interests of the public do not suffer. The public must, moreover, be made to see that their interests will suffer if by means of various trading societies the general status of the profession is lowered, and if the great mass of the middle and artisan classes should hereafter have to rely for medical attendance upon the overworked and underpaid individuals who have succeeded in underselling their competitors in an undignified struggle for so-called medical aid appointments. There is no doubt that we have to thank these lay societies which contract with medical men on humiliating terms and conditions for having at last roused us as a profession from our selfish apathy, and for having caused us to recognise and to endeavour to rectify the defects in our organisation.

What, then, are the objects of professional union? I think that these may be stated as threefold: firstly, to establish our freedom of action in all questions between us and the public; secondly, to render the profession more self-governing than it is at present; and, thirdly, to cultivate among ourselves that *esprit de corps* which, in most localities, has in the past been conspicuous by its absence. On the first head I think we ought so far to imitate trades-unions as to fix a minimum price for contract work, and this should be fairly general all over the kingdom. As is generally known, the usual payment for club members has seldom exceeded a penny a week for adults (sometimes even less), and where children are taken only a halfpenny has been charged. I quite agree with what was stated at the last annual meeting of the British Medical Association—namely, that these rates ought to be doubled, and that they could be doubled without hardship to the artisan class if we all stood together in the matter. The present rates are so low that the services rendered are regarded as semi-charitable both by employers and employed. If a more adequate payment were made, medical men would feel that they were being fairly remunerated, and the public could not fail to benefit by the increased attention which they would receive. In private practice none of us are obliged to attend for an inadequate fee. Why should we do so in contract work? Further, we want no go-betweens in the shape of these insurance companies and lay committees to which I have already alluded. We desire to be absolutely free to deal with the public in the commodity which we have to dispose of. It is not enough to reject the terms of the lay societies, but we must offer the artisan classes our attendance at a reasonable contract rate, in such a form and under such conditions as we consider compatible with our duty to them and to ourselves. We should establish a Public Medical Service on a professional basis in every district, managed by ourselves, and strictly limited to the class for whom it is intended—namely, those who cannot pay ordinary fees. I am glad to say that on the initiative of, I think, our first President, Mr. T. S. Howell, and the late Dr. Nicholas, Wandsworth has the credit of having established fifteen years ago what was, I believe, the pioneer society on these lines. The second object—namely, that of increasing the self-governing powers of the profession—I regard as being no less important than the first. The Council of the British Medical Association has at last discovered the fact that the profession is governed by the "privileged class" of practitioners, and is very properly about to bring in a Bill to increase our representation on the General Medical Council. I fear that the Association is largely controlled by the same class, since its Council hesitates to alter the Articles of Association in order to permit the performance of the most obvious of its duties towards its members—viz., to defend their material interests. I do not altogether blame the Council for this; the fault rests with the members of the branches themselves, to whom alone the Council recognises any responsibility. If these are too apathetic to stir in the matter, they must put up with the consequences. At present the advantages of membership of the British Medical Association (beyond obtaining the journal) are comparatively few. There is no doubt that the power of the Association in medical politics would be enormous if its Articles were amended in order to enable this power to be used. Another reform in the direction of self-government is that of the admission of Members of the Royal College of Surgeons of England to some control over the affairs of their College—a reform which, I am glad to say, is likely to be before long carried into effect. For the first time in the history of the College the Council has not returned a *non possumus* to the proposals of the Members, but has laid them before a meeting of the Fellows, with the result that, only last week, the latter decided by a large majority "that it is desirable to grant the Members direct representation on the Council." Then, as further evidence of the growing necessity which is felt for mutual support, I may instance the Incorporated Medical Practitioners' Association, to which many of us belong, and on which will ultimately devolve the care of the general interests of the profession if these continue to be ignored by the General Medical Council and the British Medical Association. Then there are the two Defence Unions (which ought now to be amalgamated), the Medical Sickness and Assurance Society, and other central voluntary organisations of medical men for their mutual benefit, which have sprung up within recent years, all showing that the profession has become alive to the advantages of coöperation. After all, however, the third object stated is that on which the others depend, and they can only be accomplished by the formation of local professional unions all over the country, such as have already been established at Portsmouth, Eastbourne, Manchester, and many other places. Let every medical society or branch of the British Medical Association which has not already

done so adopt an ethical code, and, side by side with its scientific work, let it do all it can to promote the material interests of its members. "United we stand, divided we fall," has been often quoted, but not yet sufficiently laid to heart by most of us. Especially I would appeal to those of our body, consultants and senior practitioners, who are no longer personally interested in many of these questions, to lay aside their Gallio-like attitude, and to bestir themselves for the sake of their less fortunate brethren. This is the truest form of medical benevolence, since prevention is better than cure. It may be, and has been, argued that professional politics are best left alone, that our duty is to treat our patients and to earn our living. There is no doubt that this is our first duty, but to say that it is our whole duty seems to me a supremely selfish view of the matter. Few will deny that we owe something to the nation to which we belong and to the community in which we live; how much more should we be willing to make some sacrifice for the profession which we have practised and which has been the means of whatever success we may have attained in the world.

I must ask your indulgence, gentlemen, for the discursive character of this paper, and I hope that its deficiencies will be amply compensated for by the interest of the ensuing discussion. In conclusion I will also venture to hope that we, as a society, will not content ourselves with mere academical debate on these ethical questions, but will temperately and perseveringly endeavour to enlist the sympathies of every practitioner in this large district in our efforts to promote professional unionism.

An Address
ON
THE NECESSITY OF MEDICAL UNION.

Delivered before the Beckenham Medical Society on Jan. 10th, 1896,

BY FRANK STURGES, L.R.C.P. LOND., L.R.C.S. EDIN.,
PRESIDENT OF THE SOCIETY.

GENTLEMEN,—At this, the first, statutory meeting of the Beckenham Medical Society, when, for the first time, it is my privilege to address you in my new official capacity, you will pardon me if I occupy a few moments on a personal matter. I wish to express how deeply I feel the honour conferred on me by you, my professional colleagues. I am fully aware how undeserved is the compliment. I know my only claim to be that chance has made me the son of one who, in Beckenham, will always be thought of with the respect due to a man who, for thirty years, practised his profession in this place without a stain on his career. Yet, though my claim be so slight, will I endeavour to the utmost of my power to preside over your meetings with equity and judgment; and, by forgetting selfish inclinations and remembering only the common good, I hope to retain at the end of my term of office the kindly feeling that prompted you to place me here. But, conscious as I was and am of the honour, I was soon to learn something of the responsibilities of my position. A few evenings ago our honorary secretary called on me and informed me that it was my obvious and imperative duty to deliver an address at our first meeting. There was no course for me but to accept the inevitable, which I did. But I retired to rest with a heavy weight on my mind, and through the night sleep was denied me, for my brain was racked in search of a subject. In treatment by the antitoxins and other serums I had had no experience. I knew little, save what I had read, of the physiology of the ductless glands and the treatment of disease by animal extracts. If I reviewed the field of modern surgery, its marvellous advances, and still more wondrous possibilities, I should be doing something only a little better than robbing Peter to pay Paul; while, had I chosen some ordinary subject, such as rheumatism, or pneumonia, or typhoid fever, I had the fear of a room filled with empty chairs, and myself, paper in hand, declaiming in sonorous tones to a solitary and sleeping host. And then, as dawn was peeping through the blinds, and noise within and without told me to prepare for another day, I thought of the causes that had resulted in the formation of our society and the objects we had in view, and decided that in them I had plentiful material, for throughout the whole medical world the same causes are acting similarly, and interest in them is well-nigh universal.

During the past year readers of THE LANCET could scarcely fail to note how, week after week, there appeared records of pitched battles between medical officers and their clubs. At first these were in small type paragraphs, and then, as the importance of the contest was recognised and general interest awakened, came special articles in larger type, written by a special commissioner. When their history is written, to Cork will be the honour of having led the van. Then followed Brussels, Portsmouth, Eastbourne, and Bexhill, where fights have been, and are, occurring with gratifying success. Further articles have described and explained without bias the position in Lincoln, Grimsby, York, Hull, Northampton, and Birmingham. One has only to read these articles to see how many evils, and hardships, and wrongs have been steadily accumulating, owing to our generous philanthropy, our lack of foresight and business knowledge, and our desire to help and encourage in every way principles of providence and self-help among the poor; and, as it was easy to see these results and trace their origin, so, too, one important fact stood out in strong relief as a necessity if the wrong is to be righted, and that fact is unity—we must be united. If we can only stand shoulder to shoulder we shall present a front against which all the clubs in Christendom may hurl themselves in vain. For the formation of the army of medical union it is necessary that every locality should take an active part by recruiting its individual units and forming a local company, and Beckenham would be unworthy of her reputation for enlightened and conservative progression if she remained dormant while activity was the order elsewhere. Our energetic secretary, acting as recruiting sergeant, worked to such purpose that in less than a month the Beckenham Medical Society was an accomplished fact; and, being formed, if I read aright, it is not our intention to be a mere figure-head. We intend to be energetic and active in thoroughly inspecting our fortifications and implements of war, and then, when we can realise the strength of our own position as compared with that of many a comrade elsewhere, we shall be ready to send a reinforcement to any part of the empire for the retaking of the citadel we only resigned when we understood not its value, when we knew not our right to its possession.

What, then, are the objects of the society? Briefly, they are as follows:—(1) To encourage social intercourse, whereby there may be established among us feelings of friendship and mutual goodwill; (2) to discuss together professional subjects, whereby we may be further interested in our work, and mutually improved in our working; and (3) for business purposes, with special reference to our work in connexion with friendly societies, clubs, dispensaries, and what are known to us as medical aid societies. The first two speak for themselves, but, lest you should regard them too lightly, I will stay to point out their necessity to our third object. Unless we are good friends we cannot rely on one another, and unless we know one another we cannot be good friends. Unless we prove ourselves capable in our practice, any decided course of action would fail to carry weight in public estimation; and we risk being incapable if, through lack of the stimulus given by necessary discussion, we neglect to keep abreast with general professional progress. But the main question of interest to all of us is contained in our third object—viz., our action with regard to the various benefit clubs and societies. Now, in our dealings with these there are certain main points which we as a profession should keep constantly before us; there are certain conditions it is our duty, individually and collectively, to strive to obtain. The first and most important is the fixing of a wage limit. Our profession have ever proved themselves ready to help the deserving poor; but the time has come for us to put down our foot firmly and refuse to allow those who can well afford a proper fee the benefit of what was never intended for them. This is what the profession in Cork and Brussels have been insisting on. This, likely enough, will ere long be the battle cry all over the country. What this wage-limit is to be must, I fear, always be a local question.

There would be great advantage, could one be fixed which would be suitable everywhere, as in that case many difficulties would disappear; but conditions of living vary so much in different parts that they must always be allowed to guide the decision. One point is certain, the limit must be one which is considered to be fair by the bulk of the profession of the place. The next point is equally important. We as a profession must resolutely set our faces against any society which includes medical aid as a bait for insurance, burial, or other business, and which is worked by touting and canvassing. Further, we should refuse to be connected with any benefit society formed and worked as a business by individual enterprise or a speculative committee, or in which the medical officers are what is known as "sweated" of some of their legitimate profits. And next we should insist that the profession be properly and adequately represented on the committee of management of every benefit society that claims recognition.

Now let us briefly survey the working of the chief kinds of medical clubs and see how far, or rather how little, they conform to these requirements. And we will begin with what are possibly the least objectionable—viz., the incorporated friendly societies. The least objectionable I have said, and, I might also add, the most powerful. Well, they are constant and continual offenders against the principle of a wage-limit. Their members over and over again can be proved to be men well-to-do, even rich. It is intolerable and even degrading that these should receive medical advice and medicine for the paltry sum of from 2*s.* 6*d.* to 4*s.* per year. There is no medical element in the committee of management, and their medical officers are liable to be called before a number of ignorant and common men, consumed with the idea of their own greatness and the comparative littleness of medicine, there to answer for more or less imaginary errors of omission and commission, and be metaphorically, perhaps even actually, sat upon by men who are incapable of forming any correct estimate of the justice of the complaint on which they presume to pass judgment. No argument can justify such a condition as this. Yet till lately there were advantages which, to the young and struggling, made such an appointment a desirable thing, for the holder might look for his private patients among the families of his club members. Now that is fast becoming a thing of the past, for the women and children have also to be admitted on an equal or smaller scale of remuneration. This has recently happened at Portsmouth and led to a sharp contest, beginning with the resignation of a medical officer, who had the support of the whole of the profession in the town. I wish I could report that no one from outside had applied for the vacant post, but I can tell you that those who did were defeated by a large majority, and the original holder was reinstated on his own terms. Next let me direct your attention to the slate clubs. Slate clubs were originally the creation of the publican, for the purpose of keeping his customers together. Members pay, say, 6*d.* a week, and the publican is the treasurer; he can be trusted with the money, and from self-interest alone is sure to keep a true account. Of the money received all comes back by a division at Christmas after deducting the medical officer's remuneration, which is from 2*s.* 6*d.* to 4*s.* a member per year, and sick pay. Of course, here there is no wage limit; it is to the interest of the proprietor to have among his members men who can spend money and increase his trade; he avoids as far as possible the needy poor, and, under any circumstances, reaps a fine harvest each Christmas, when much of the money divided out comes back to his till. The medical officer has no voice in the selection of members, and indirectly he assumes the position of publican's business assistant. His remuneration is a paltry sum, that he has often to more than spend on necessary medicines. I have said that slate clubs were originally the creation of the publican. More recently they have come into vogue among the organisers and workers of the Established Church and other religious denominations. But they have only been instituted in self-protection and to keep men away from the public-house. They are on the same lines, and are otherwise open to the same objections; but they need hardly concern us for the simple reason that when the public-house slate clubs are demolished there will be no further need for them. In this place I am glad to say we have no example of the benefit society generally called self-supporting, which is the property and means of livelihood of one individual. Those who wish to know of them can find them fully described in the article by the special commissioner of THE LANCET in the issue of Jan. 4th. Here, as the commissioner so well and truly says, the medical man becomes the employé or "wage-slave" of some "captain of industry"; he loses his independence; he has to please his master and not his patients; he is no longer the guardian of the public health, but the promoter of a private business, and must sacrifice everything to make the profits flow into his master's pocket, or lose his place. A most deplorable position. In many places, as at Lincoln, the friendly societies have organised dispensaries where they employ one or more medical men exclusively—i.e., they are debarred from private practice. Besides the absence of the wage limit, which is here a great cause of complaint, it is proved beyond doubt that there is far more work than can by any possibility be properly done. The wealthier and more influential members absorb much more than their legitimate share of the medical officers' time, to the detriment of the poorer ones; and, in addition, the medical man is often "sweated" even of his rightful pay. A slave day and night, without prospect of any improvement in his position, he might well write on his door: "Since entering here I have abandoned hope." There are no doubt other varieties with which I could detain you, were there any need. I will, however, only say a word on the medical aid societies. I think you well know the objections to these. The fact that their medical officer's name is used as as a bait to induce assurance, and that canvassers are employed to tout indiscriminately among the people quite irrespectively of the fact that they are already the patients of some other practitioner in the place, or members of some more legitimate dispensary, has already been debated on at our special meeting. When the Cork trouble first began and the medical men had resigned their clubs an agent of a Friendly Society presented himself and appealed for the assistance of the profession, telling them he was at once to employ eighteen canvassers, and threatening, on their refusal, to import new medical men. At a special meeting called to consider the proposal the men of Cork passed a resolution "denouncing the touting and canvassing so inseparable from the system as calculated to prostitute the practice of medicine and bedaub the escutcheon of an honourable profession." And with that denunciation few in their hearts will be found to disagree.

I have put before you—and I believe without exaggeration—a deplorable condition of things, and one that cries out loudly for remedy. It is a fact that in many large towns of England—as, for example, Lincoln and Northampton—the proportion of people receiving medical attendance from some such society as those I have analysed is more than one-half of the whole population, and I have no reason to disbelieve that the same proportion holds good over the whole country. Our profession is ever and continually increasing, and we have a right to expect to live by it. But if we remain much longer inactive even that will be barely possible. Even now, however, we have the remedy in our hands. Let there be formed in every place, as we have formed here, a medical union, so that, joining hands, we can reach from one end of the kingdom to the other. Then let there be started in every town and village a provident dispensary with a rightful place on the staff for every medical man who so wishes, and with every medical man on the committee of management. That committee may be increased by the addition to it of deputies elected from the friendly societies and clubs. Let a wage limit be fixed according to the peculiar circumstances of each locality; and let the medical man selected by each proposed member have the power of asking the committee to refuse anyone who for this reason or that may be deemed unfit. Also let that be the only medical aid society in the place. This has been done at Eastbourne and Bexhill already with success, and if we stand together it may be done everywhere. The friendly societies, the assurance societies, the burial societies, and the clubs can still go on. They will not be interfered with in their legitimate and useful work, but only with regard to their medical aid. And even there they can still be adequately represented, for there can be a place on the committee for them all. So the only ones to suffer will be those having no right to enjoy. Those entitled to aid will, indeed, be far better served, for there will be established an honourable rivalry among the medical staff, from any of whom they have a right to select those who can serve them best. Here in Beckenham we have already got our medical union and our dispensary, and if we all strive for it the rest will come. We have only to make up our

minds as to our course of action and then explain our position fairly to the people. Avoid the committees—probably they are composed of those who are not entitled to dispensary aid; or, if it be necessary to appeal first to them, let us appeal from them to the constituencies, in whose judgment I have confidence, for of their goodwill to our profession I can have no doubt. Then, even if at first they fail to see the benefit and are not desirous of the change, remember that, united, we have a force at our back which will greatly aid reason. And should we have to use our force to aid their reason we must look out for deserters—not in our own ranks, I do not fear that—but deserters from outside. They have had deserters at Brussels, and there boycotting was found to be a weapon too powerful to resist; and so we shall find it here and everywhere. Desertions can only be by the few, who hope to gain—no matter how dishonourably—by the worthy action of their more worthy brethren; and if by chance our own power be not sufficient—and I speak now of united action all over the country—then, knowing our enormous strength—knowing, too, the justice of what we have done—we can appeal with a force well-nigh irresistible to the General Medical Council, and not ask, but insist, that those who should be our brethren, but who are our enemies, should be removed from the scroll of an honourable, an upright, and a charitable profession.

ON THE TREATMENT OF THE HÆMORRHAGES AND URTICARIAS WHICH ARE ASSOCIATED WITH DEFICIENT BLOOD COAGULABILITY.

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I HAVE in previous communications [1] directed attention to the fact that the coagulability of the blood can be increased (1) by calcium salts, (2) by carbonic acid, and (3) by solutions of cell nucleo-albumins (Wooldridge's tissue fibrinogens). I propose in the present communication first to amplify certain statements I have made upon these subjects; secondly, to direct attention to a simple method of administering carbonic acid; and, thirdly, to suggest that calcium chloride may prove useful in the treatment of urticaria, wherever the urticarious eruption is associated with a condition of diminished blood coagulability.

The following cases may be of interest as showing the increase of blood coagulability which can be obtained in hæmophilia by the internal administration of calcium chloride:—

Patient.	Age.	Date of antecedent blood examination.	Coagulation time in standard tube (temp. 18·5°C.).	Amount of $CaCl_2$ administered.	Date of subsequent blood examination.	Coagulation time in standard tube (temp. 18·5° C.).
Boy (very severe hæmophilia)	9 years	April 13th, 1894	Exceeds 54 minutes	Two 2 gramme doses	April 14th, 1894	25 minutes.
				Two 2 gramme doses	April 15th, 1894	13½ minutes.
		Sept. 28th, 1894	14 minutes	Two 0·6 gramme doses	Sept. 29th, 1894	6¾ minutes.
Brother of above (less severe hæmophilia)	7 years	April 13th, 1894	7 minutes	Two 2 gramme doses	April 14th, 1894	4 minutes.
		Sept. 28th, 1894	9¼ minutes	One 0·6 gramme dose	Sept. 29th, 1894	5¼ minutes.

It is to be noted that the augmentation of coagulability which is here recorded was not in either case a permanent augmentation of coagulability. In these, as in all other cases of hæmophilia which have come under my observation, a continued administration of twenty- to thirty-grain doses of calcium chloride resulted in a diminution of coagulability below the original norm. There is evidently in the hæmophiliac, just as there is in the normal, patient a maximum of lime addition which ought not to be exceeded. For the purposes of the arrest of hæmorrhage this subsequent diminution of coagulability may, however, generally be left out of account, for when the maximum of coagulability is reached hæmorrhage will generally be arrested by the sealing of the wound by clot. I have seen this result follow upon the internal administration of calcium chloride in several cases of hæmophiliac hæmorrhage. I am also indebted to Dr. Newcombe of Gateshead-on-Tyne, to Mr. Horace Potts, to Dr. A. H. Jones of Northampton, and to Surgeon-Lieutenant J. N. Macleod, I.M.S., for notes of cases in which hæmophiliac hæmorrhage was arrested by the internal administration of calcium chloride. The less soluble calcium salts may also be usefully applied in the form of local applications to the bleeding surfaces. I have obtained very satisfactory results from the application of finely powdered chalk mixed into a paste with a ¼ per cent. solution of calcium chloride. Dr. N. F. Surveyor had previously been good enough to send me the notes of a case under his care in which an arrest of severe hæmophiliac bleeding from the gums was obtained by an application of calcium phosphate. In Dr. Surveyor's case escharotic styptics had previously been applied with unsatisfactory results.

Hypodermic administration of calcium chloride is a method which I have forborne to apply upon man, as I have seen extensive (apparently aseptic) sloughing to result from a subcutaneous inoculation of calcium chloride upon a dog. I have also in a hæmophiliac boy seen scars of extensive sloughing which had been produced by a hypodermic injection of calcium chloride employed for the arrest of hæmorrhage.

Before dismissing the topic of the effect of calcium salts in hæmophilia it may not be out of place to put upon record the fact that I have been able to convince myself of the truth of Dr. Wickham Legg's statement that hæmophiliac children are not infrequently addicted to eating plaster, mortar, and similar substances. For instance, the sole surviving maternal uncle of the two hæmophiliac boys who have already been dealt with in this paper spontaneously volunteered the statement that he had in his boyhood a constant craving for lime and plaster. This man is the subject of moderate hæmophilia, and has an ankylosed joint. Again, I was informed that a maternal first cousin of these same boys "could not be kept off from eating plaster." This boy, a child aged four years, who is the subject of severe hæmophilia (blood coagulation—time twenty-nine minutes), used to pick out the mortar from between the bricks when he was sent out of doors to prevent his eating plaster off the wall. I was shown a large portion of wall denuded of plaster as evidence of the child's plaster-eating propensities, and I was informed that his craving for plaster was most marked before his hæmorrhagic attacks.

I will now pass on to consider the other means which are at our disposal for combating hæmophiliac hæmorrhage. The internal and external administration of calcium salts does not always result in the arrest of hæmorrhage. Even so large an increase of blood coagulability as that which I have recorded in the case of the first boy (vide Table infra), would not necessarily have resulted in an arrest of hæmorrhage. A blood coagulability of 6¾ minutes [2] is no bar to the occurrence of very severe capillary hæmorrhages. In cases of severe hæmorrhage it will, therefore, always be judicious to supplement the treatment by calcium salts by the inhalation of carbonic acid. I have employed this treatment upon two occasions in the treatment of hæmophiliac hæmorrhage. Upon both occasions I obtained a comparatively prompt cessation of hæmorrhage. I have also obtained very satisfactory results from the application of the method

[1] (1) Brit. Med. Jour., Dec. 19th, 1891; (2) Proceedings of the Royal Society, vol lv., 1894; and (3) Brit. Med. Jour., July 14th, 1894.

[2] Normal blood coagulates in from two to four minutes in the standard capillary tube at a temperature of half blood heat. (18·5 C.) The apparatus for blood coagulability estimations can be obtained from Mr. A. E. Dean, 73, Hatton-garden, London, E.C.

in the case of a patient[3] in the Royal Victoria Hospital, Netley, whose blood coagulability was seriously diminished by prolonged tropical fever, and who was reduced to an extremely precarious condition by perpetually recurring epistaxis. In the case of this patient all the ordinary methods of arresting hæmorrhage had been resorted to unavailingly. He had been treated successively with ferric chloride, with turpentine, with calcium chloride, with hypodermic injections of ergot, with alum insufflations, and with ice applications. His coagulation period varied during the whole of this period of treatment between eight and four and a half minutes. The number of his white blood corpuscles, though increased under the influence of the turpentine, often fell below 1000 per cubic millimetre. Under these circumstances administrations of carbonic acid were resorted to whenever the epistaxis recurred. The administration of the gas was invariably followed by a prompt arrest of hæmorrhage. The method of administration which was adopted consisted in leading a stream of carbonic acid into the nose through an india-rubber tube passed up well into the nostril. The carbonic acid was supplied from an ordinary Kipp's gasogene, such as can be purchased at any chemical apparatus dealer's for a few shillings. The patient was directed to hold his head forward in order that the blood should run out of the nostril along the india-rubber tube instead of trickling down the posterior nares. The coagulative effect of the carbonic acid was gauged by noting the rate at which the blood dripped from the tube. On several occasions this treatment was supplemented by a previous syringing out of the nostrils with ½ per cent. calcium chloride solution. In the case of epistaxis it is not necessary that the patient should inhale the gas: the local effect of the gas at the seat of hæmorrhage will suffice. The same statement would hold good of a possible treatment of metrorrhagia by an administration of carbonic acid. It is, however, necessary to insist upon the fact that an excess of carbonic acid must be avoided if the method is to be effectual. My experiments upon animals[4] have shown that the accelerating influence of carbonic acid gas upon blood coagulation is manifested only in presence of a sufficiency of oxygen. When this fact has been realised it becomes evident that the inhalation of carbonic acid gas would be applicable to the treatment of hæmoptysis. It is not necessary that the patient should be in any degree asphyxiated. Asphyxiation would militate against the efficacy of the method. The stream of gas should first be turned on very gently so as to induce anæsthesia of the mucous membranes. As soon as this has been effected very large quantities of the gas can be tolerated without discomfort. I have not had an opportunity of testing the method in a case of hæmoptysis; it would appear, however, to be deserving of a trial, for it is a method which might result in an immediate arrest of hæmorrhage. If the administration of carbonic acid were not effectual by itself, its coagulative effect might be enhanced by a previous administration of calcium chloride. It might, for instance, be applied an hour after the administration of thirty grains of calcium chloride by the mouth.

Finally, before dismissing the subject of the arrest of hæmorrhage, it may be well to advert to the employment of solutions of cell nucleo-albumins as local applications to bleeding surfaces. The employment of physiological styptics of this kind would appear to be especially indicated in the treatment of hæmophilia, for I have convinced myself by a somewhat extensive series of observations on the blood of hæmophiliac families that the blood of hæmophiliac patients and of their female ascendants is characterised by a notable paucity of white blood corpuscles, and especially by a relative paucity of the polynuclear white blood corpuscles. In other words, hæmophiliac blood is deficient in the cellular elements which contribute the nucleo-albuminous element to the formation of fibrin. An addition of nucleo-albumins is, therefore, essential to the formation of a sound clot. The practitioner can always readily obtain a supply of these by mincing up a thymus gland, a testicle, or (if these cannot be obtained) a piece of gastric mucous membrane, in a little 1 in 500 solution of carbonate, and by filtering off the infusion, either immediately or after the lapse of a few minutes, through a piece of calico. I have employed such solutions of cell nucleo-albumins in two cases of hæmophiliac hæmorrhage; in both cases the hæmorrhage was taking place from cuts upon the hand. The result of the application of this physiological styptic was in each case the formation of an enormous mass of clot round the wound. In one of the cases bleeding continued for days under the clot (this was no doubt due to some dislodgment of the clot), and the skin became extensively macerated. I had in this case to clear away the clots and to arrest the hæmorrhage by inhalations of carbonic acid combined with an application of lime salts. It is, perhaps, not too much to say that with these three methods of arresting hæmorrhage at our disposal very few, if any, cases of hæmophilia ought to be allowed to succumb to their capillary hæmorrhages.

I have now to deal very shortly with the question of the treatment of urticarias which are associated with deficient blood coagulability. It is probable that most urticarias fall under this category. Instances in point are the urticarias which result from eating unripe or acid fruit. These, as I have elsewhere pointed out,[5] may almost certainly be attributed to a diminution of blood coagulability due to the abstraction of calcium salts from the blood by the vegetable acids. Again, the urticaria which supervenes upon the eating of certain molluscs and crustaceans is if one may judge by the analogy of what happens in animals, associated with a diminution of blood coagulability. There is yet another example of the association of diminished blood coagulability with urticaria in the case of the urticarious eruption which, as Shore first showed, occasionally occurs in dogs whose blood has been deprived of its coagulability by an injection of peptone. I was led by the analogy of these facts to inquire whether the urticaria which frequently supervenes upon an injection of antidiphtheritic serum is also associated with a diminished blood coagulability. In the few cases which have come under my personal observation I have found that the blood coagulability is really notably diminished. A practical point in the treatment of urticaria would appear to result from these considerations. Whenever we are dealing with an urticaria which is associated with a diminished blood coagulability any method of treatment which will augment blood coagulability will, in all probability, exert a favourable influence upon the course of the eruption. Acting upon this assumption, I have treated the few cases of post-antitoxin urticaria which have come under my notice with 15 to 30-grain doses of calcium chloride. This treatment was apparently very successful. In one typical instance the coagulation time of the patient who was suffering from acute urticaria stood at eight minutes. Within a few hours after the administration of the calcium chloride it had come down to four minutes, and the rash had entirely disappeared. This method of treatment would appear, therefore, to deserve investigation at the hands of those who have frequent opportunities of observing this form and other forms of urticaria.[6] The treatment of urticaria by carbonic acid inhalations would hardly appear to be a practical method. Its results would, however, have a certain theoretical interest, as it seems probable that the nocturnal supervention of urticaria, like the nocturnal supervention or aggravation of hæmophiliac hæmorrhages, must have some relation to the diminished nocturnal output of carbonic acid.

In all cases of urticaria associated with diminished blood coagulability, just as in all cases of hæmophiliac bleeding, it is of the utmost importance to avoid diminishing the blood coagulability by the administration of wine. Wines, especially the more acid ones, diminish blood coagulability by virtue both of the alcohol and the free citric and tartaric acids they contain, which abstract lime salts from the blood. In a case which came under my notice incidentally even the smallest quantity of any wine, except port wine, produced a slight œdema of the fingers and an urticarious eruption. The urticaria in this case was a mere unregarded incident in a case of incipient tuberculosis which was being treated with creasote. If, however, the urticaria was really referable to a deficiency of lime salts in the blood, it was a therapeutic indication of the utmost importance, for the supervention of the urticaria would be the equivalent of a call for lime. Now, a demand for lime on the part of a tuberculous organism is a demand which ought to be carefully attended to, for Metchnikoff has shown

[3] I am indebted to my friend, Surgeon-Colonel E. Fairland, for the opportunity of studying this case.

[4] Proceedings of the Royal Society, loc. cit.

[5] Brit. Med. Jour., July 14th, 1894.

[6] I have elsewhere (Brit. Med. Jour., Oct. 12th, 1895) pointed out that post-antitoxin urticarias appear to be much rarer after the injection of antitoxic plasma than after the injection of antitoxic serum.

that one of the methods of defence which is employed by the organism is the encapsulation of the intracellular tubercle bacilli in capsules of lime.

Netley.

A CASE OF VARICOSE ANEURYSM OF THE ASCENDING AORTA.

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THE patient, aged sixty, had always done a great deal of hard work and been temperate. He had never had syphilis, and had always enjoyed very good health until the winter of 1894–95, when he was laid up for five months with bronchitis. Since then he had suffered from shortness of breath, but not sufficiently to incapacitate him from work. This was his only illness, except that he had broken his left arm nine years ago. On Sept. 17th, 1895, whilst at work, he suddenly found great difficulty in breathing; his eyelids swelled, and his face became bloated, flushed, and livid in colour, as did also his ears. He had no pain. The attack passed off on his lying down, but recurred several times during the day, passing off whenever he rested; however, he was able to finish his day's work. Next day his face was swollen and livid. He had to relinquish work at 11.30 A.M. on account of shortness of breath, and had done no work since. On the 22nd he noticed, on getting up in the morning, that his right arm and hand were swollen. This swelling went on increasing until his admission on Sept. 27th. The dilatation of the veins over the lower part of the chest he had first observed about a month previously. With the exception of shortness of breath and a feeling of tightness in the swollen parts he felt well. On his admission the patient's face was flushed, cyanosed, and swollen, the eyelids being especially puffy. The neck was swollen, and the veins appeared to be very full of blood and prominent, their coats feeling hard to the touch, and there was no pulsation in them. Over the right side of the chest and back there was marked œdema, pitting on pressure, as low as the sixth space. The right arm and hand were very much swollen and œdematous, and the skin was stretched and tense. The right arm measured 15½ in. and the left 12½ in., and the upper part of the right forearm 13½ in. and of the left 11¼ in. in circumference. The chest was well formed, but expanded as a whole. Over the lower part of the chest there were several patches of dilated small veins of a bluish colour. A broad band of dilated veins extended from the left side of the lower angle of the right scapula along the fifth intercostal space over the middle line across the ensiform cartilage, and along the left sixth intercostal space as far as the mid-axillary line. Behind, a broad patch of bluish dilated veins extended across the back below the lower angles of the scapulæ, the centre of the patch being about the twelfth dorsal spine. The lungs were healthy, except that the breath sounds were feeble. The apex-beat of the heart was diffused in the fifth and sixth spaces, the maximum being in the fifth space, half an inch outside the nipple line; dulness began above at the third rib, where it joined an area of dulness to be described later, extended to the apex-beat, and to the right half an inch over the right border of the sternum. The heart beats were irregular. At the base a loud rumbling systolic murmur ending in a squeaking sound was heard, followed by a long diastolic murmur, musical or whistling in character. No normal second sound was heard, and the first was very faint. The same murmurs were heard at the apex, but not so loudly. The murmurs at the base were very loud at the systole and then gradually diminished. It was doubtful whether the murmur was not continuous; as a rule it seemed to run through the diastole, to end just before the first sound, but occasionally ran right up to it, and was then continuous. The murmurs were faintly heard in the back. There was dulness over the sternum from its upper border to the level of the lower border of the third costal cartilages, roughly square-shaped in outline, and extending at the level of the second cartilage 2¼ in. to the right and 1 in. to the left from the borders of the sternum. The upper limit of this area extended from a point on the left first rib 1¼ in. to the left of the left sternal border to a point 2½ in. to the right of the right sternal border on the first rib, and the lower parallel to it from the junction of the left third costal cartilage with the sternum to a point on the third rib 2¾ in. distant from the right sternal border. In the back, on the right side, there was deficient resonance as far as the level of the fourth spine. The murmurs were faintly heard over the dull area in front, the breath-sounds being feeble and distant. There was an entire absence of thrill or pulsation over this area. The abdominal viscera were normal. The urine contained no albumin or sugar. The left pulse was more plainly felt than the right, probably due to the œdematous condition of the right upper extremity. There was no laryngeal paralysis or tracheal tugging. The right pupil was a trifle larger than the left. There was no cough. The legs and feet were not swollen, the œdema being confined to the parts mentioned above. No enlarged glands were detected anywhere. Rest in bed relieved the dyspnœa, except that he could not lie down comfortably. The cyanosis passed away except for some lividity of the lips, and the swelling disappeared from the face and neck, and mostly from the chest, after he had been in hospital for two days, but the swelling of the right arm and forearm remained unchanged or slightly increased. He felt well, complained of no pain, and was anxious to sit up. The symptoms and physical signs remained unchanged until Oct. 17th, when he complained of a choking feeling in his throat and increased difficulty of breathing and lost his voice. His neck and face again became much swollen. He was too weak and ill to be much examined, but there seemed to be no decided change in the physical signs. He died suddenly during the night.

Necropsy.—A noticeable feature was the very dark colour of all the organs and of the contained blood. An aneurysm the size of a large orange occupied the ascending aorta; the transverse and descending portions of the aorta were somewhat dilated, and its lining was rough and calcareous. The aneurysm pressed slightly upon the œsophagus, but not upon the recurrent laryngeal nerve. The posterior arytenoid muscles were healthy. The superior vena cava was adherent to and compressed by the aneurysm, and about one inch and a half above the termination of the vein in the right auricle there was a communication between the aneurysm and the superior vena cava by an irregular opening the size of a shilling, with sharp, jagged edges. The vena cava, though compressed, remained open above and below the communication with the aorta, and was free from clot. The right innominate vein was obstructed by a firm, white, ante-mortem thrombus, firmly adherent to its walls; the left innominate vein was empty and dilated; the left jugular contained a little fresh clot. The heart was large, its cavities containing a little clot. The left ventricle was somewhat hypertrophied. The aortic valves were thickened and a little atheromatous, but held water; the other valves were healthy. A tendinous band passed across the left ventricle from one of the papillary muscles to the opposite wall. The right auricle was fully of normal size, its appendix being large and the opening of the inferior vena cava normal. The pulmonary artery was slightly dilated and adherent to the aneurysm. Except that the lungs were deeply congested, there was nothing to remark about the other viscera. Permission to examine the brain was not obtained.

Remarks.—The symptoms and physical signs of the patient on admission obviously pointed to pressure upon the superior vena cava from some cause, and the œdema of the chest-wall and dilated veins over the lower part of the chest indicated obstruction of the vessel below the entrance of the azygos vein. The suddenness of the onset suggested the presence of an aortic aneurysm which had opened into the superior vena cava. This sudden onset is, as Pepper and Griffith show in their excellent paper on this subject,[1] a valuable diagnostic sign. In my case the opening of the aneurysm into the vena cava probably took place on Sept. 17th, the date of onset of serious symptoms. No doubt the aneurysm had been in existence some time, but had not betrayed its presence by any symptoms, as it did not at first press upon any important structure. The attack of bronchitis during the previous winter may have caused growth in size of the aneurysm by frequently repeated temporary increase of arterial tension due to attacks of cough. As the patient had persistent shortness of breath after this attack of bronchitis, and had noticed the dilated veins on the lower part of his chest for at least one month before

[1] International Journal of the Medical Sciences, vol. ii., 1890, p. 329.

Sept. 17th, the vein must have been pressed upon for at least this time. The absence of swelling of the left side of the chest and left upper extremity was probably due to the obstruction in the vein being very gradually established, thus giving time for the establishment of a collateral circulation, whilst the complete thrombosis of the right innominate vein would account for the persistent swelling of the right upper extremity. The murmurs, from their peculiar characters, strongly suggested varicose aneurysm, but they did not present the continuous buzzing or humming noise that I have heard in another case of this kind. Sometimes they appeared to be continuous during the diastole, at others they died away towards the end of diastole, but even then the remarkable whistling and squeaking sounds were unlike those heard in an ordinary case of double basic murmur. The complete absence of pulsation, of thrill, and of loud conduction of heart sounds over the dull area was difficult to account for clinically on the supposition of varicose aneurysm, for with an aneurysm near enough to the surface to present such a large area of dulness the presence of well-marked pulsation was to be expected. On the whole, therefore, though the diagnosis of varicose aneurysm seemed to be most probable, that of mediastinal new growth could not be absolutely excluded.

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A METHOD OF EXAMINING CLUB-FEET.

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IT is necessary, before thinking of treatment, not only to ascertain which form of club-foot is before one, but also to be precise as to the cause. To facilitate this, it has been my endeavour to draw out a plan for examination and to give illustrations in point as far as possible. The various steps of the examination are: (1) The history; (2) the gait on entering the room; (3) the position of the foot and limb on standing and sitting; (4) an outline or impression of the sole of the foot; (5) general examination of the affected limb or limbs as to shape, size, muscular development, diminished or excessive mobility of the joints, temperature, the condition of the skin as to colour, integrity, and the presence of corns or thickened skin over the heels and beneath the balls of the toes (the boots should also be looked at, and any unequal wear at one or more spots noted); (6) the passive movements which may be effected by the surgeon, and the directions from which resistance is felt; (7) localisation of the resistant structures; (8) localisation of contracted or paralysed muscles (this is effected by touch and by movement on the part of the patient); (9) electrical reactions; and (10) signs of abnormal and arrested development, especially of bones. To proceed to details.

1. *The history.*—The first question asked is, When was the deformity noticed? Of course in congenital cases, if the deformity is at all marked, it is seen immediately after birth. In slight cases difficulty may arise. Mr. Reeves[1] says, regarding the normal form of the fœtal foot: "In it the plantar arch is but little formed, the sole of the foot is turned in, and the anterior part slightly adducted, but the peronei are capable of turning the sole outwards. To distinguish the former natural position from slight cases of club-foot the infant should be placed near the fire; if the foot be normal, the child will flex the thighs upon the abdomen, the legs upon the thighs, and turn the feet out, but in equino-varus it will not be able to evert the foot." Congenital clubfoot is as often double as single; paralytic club-foot is more often single. In the latter case the information will be often volunteered that the child was quite well until about eighteen months old, then it was feverish and had a convulsion, and next morning it was unable to move the limb. In spastic cases, which are often bilateral, some history of asphyxia at birth, or of symptoms of meningitis, or an account of a fall, blow, or sudden shock, is forthcoming. Inquiry should be made as to rheumatism, and, if an adult, as to gout in the family, and whether the child has recently suffered from exanthemata. The mode of delivery is often of interest; many congenital cases have been breech presentations or one of twins. Some cases of congenital club-foot are distinctly hereditary.

2. *The gait on entering the room.*—The tip-toe forward gait of spastic cases is very characteristic. In infantile paralysis, if the case be one of equinus, the toes are dragged and the heel is raised; if the affection be calcaneus, the heel is brought to the ground with much emphasis, while the front part of the foot flaps somewhat as the patient advances to take the next step. Some shortening is frequently present in paralytic cases, and evidence of this is seen in the halting gait and the drooping of one side of the pelvis and one shoulder. In congenital club-foot it should be noted which part of the foot comes first into contact with the floor. In equino-varus considerable turning in of the foot and raising of the heel will be seen. Weakness of one leg, with the arm held rigid and the forearm pronated and flexed, are suggestive of infantile hemiplegia.

3. *The position of the foot and limb on standing and sitting.*—It is essential that the patient be examined in both positions, otherwise errors may be made. For example, in right-angled contraction of the tendo Achillis, when the patient is sitting, he can bring the heel to the ground because the calf muscles are relaxed; but on standing, with the leg fully extended and the calf muscles tense, the heel may be an inch or more off the floor. Again, cases which appear to be equino-valgus, when the patient is standing, resolve themselves into equinus if the sitting position be adopted and the leg placed at right angles—for the reason that, in order to bring the heel to the ground in walking with a somewhat short tendo Achillis, the foot is abducted or adducted at the ankle, and the shortness of the tendon is thus compensated. Cases of varus should be examined with the patella to the front and the true position of the foot thus ascertained.

4. *An outline or impression of the sole of the foot.*—This may be obtained in several ways—e.g., by applying printer's or ordinary ink to the sole and directing the patient to place his foot firmly on a sheet of white paper, or by applying smoke to a sheet of glass and telling the patient to stand on it. By these means an impression is obtained. Or, if an outline only be desired, the sole of the foot may be well moistened with water, and the foot placed firmly on a sheet of brown paper. The outline may be rapidly put in with ink, before the impression on the brown paper dries. It is valuable, in cases of arcuatus and flat-foot, to obtain an impression or outline at the commencement and at the end of treatment.

5. *General examination of the affected limb.*—The shape of the limb, especially as to muscular wasting, and its development as compared with its fellow, should be noticed. Thus in congenital and spastic cases the swelling of the calf is at a higher level than in the healthy limb. In infantile paralysis wasting of the anterior or posterior muscles will readily be seen—so, too, in the late stages of spastic cases—while the enormous calves of pseudo-hypertrophic muscular paralysis will not escape attention. The bones are often felt to be of less thickness, and not only the leg, but also the foot, is shorter than normal. An excessive mobility at the knee-joint, especially if rotation is free in the extended position, is a factor of importance in the prognosis and treatment of club-foot, both of the congenital and paralytic varieties. Much of the inversion in talipes equino-varus is due to it, and it needs methodical correction. In infantile paralysis a flail-like condition of one or more of the joints is present, and the knee may be hyper-extended. The temperature of the surface of the limb and the colour of the skin, often dusky-red or blue, with the presence of chilblains and other signs of imperfect circulation, are characteristic of anterior poliomyelitis and of some congenital cases in which spina bifida is present. The presence of corns and false bursæ indicates that undue pressure exists at the spots where they are found. Thus in right-angled contraction of the tendo Achillis a row of corns will be found beneath the heads of the metatarsal bones, and the same condition is seen in talipes arcuatus and plantaris. In old-standing cases of equinus the heel is feebly developed and small, and the skin over it quite thin, thus showing that it has not at any time come into contact with the ground. It is well to look at the boots to see if they are worn unequally—e.g., in the cases of so-called weak ankles.

6. *The passive movements which may be effected by the surgeon.*—In most cases of clubfoot the nature of the

[1] Practical Orthopædics, p. 152.

deformity is evident, but it will happen that in slight cases it is difficult to decide by merely looking at the foot whether adduction or abduction is too free, and similarly with extension and flexion. The foot should then be moved passively in these directions, and it should be noticed in which of the positions it can be placed with the greatest ease. These movements should be carried out with the child both standing and sitting. By means of the movements a general idea of the condition of the structures is gained. Thus the "set" state of resistant and rigid clubfoot can be felt.

7. *Localisation of the resistant structures.*—The heads of the metatarsal bones being drawn away as far as possible from the heel, any bands of plantar fascia standing unduly in relief may be seen and felt. If any doubt exists, the position of the band may be localised accurately by pressing gently the nail of the forefinger on it, and its tension thus quickly ascertained. The same method applies to the tendons.

8. *Localisation of contracted or paralysed muscles.*—Their identity may roughly be determined by sight and touch, but in cases of infantile paralysis and in spastic and congenital cases it is advisable to put the patient through a kind of drill. Thus if equinus be present it is necessary to ascertain whether any, and if so what, amount of power remains in the extensor muscles. The patient, if sitting, should be told to try to raise the toes towards the surgeon's finger, placed at one or two inches above them. Then the dorsal flexion of the great toe may be tried in the same way in order to see whether the extensor proprius pollicis has escaped or not. Similarly in calcaneus an attempt may be made to touch the surgeon's fingers held an inch or two below the toes. To estimate the power of abduction and adduction in the foot the finger should be placed one or two inches to the outside or inside of the foot. In paralytic cases it is essential to know whether any paralysis of the quadriceps extensor be present. It is not then sufficient for the surgeon to hold his hand at the level of the patient's knee and tell him to touch the hand with the toes. With one hand holding the condyles of the femur the patient's thigh should be fixed, while the other hand should be held out for the patient to touch with his toes. If there be some paralysis of the quadriceps extensor, and the femur be not fixed when the patient is told to extend the leg, it will be noticed that he first flexes at the hip and raises the thigh off the chair, thus getting a start, so to speak, and then extension of the leg is made; so that this flexion at the hip tends to mark slight weakness of the quadriceps extensor and should not be permitted in testing the power of this muscle.

9. *Electrical reactions.*—In cases of spastic paralysis the affected muscles react to the constant current with less current than normally, while in paralytic cases, not only is more current required than normally to obtain a contraction from a given muscle, but if the muscle be hopelessly damaged no reaction at all is obtained. In those muscles which are less affected the reaction of degeneration is seen, and the muscle responds for a time more readily to the galvanic current, while stimulation of the nerve gives little or no response, and both the muscle and the nerve fail to respond to the faradaic current. Then, too, in the reaction of degeneration, instead of the order of ease of contraction being K.C.C., A.C.C., A.O.C., K.O.C., A.C.C. may equal K.C.C., or A.C.C. may exceed K.C.C., and K.O.C. may exceed A.O.C.

10. *Signs of abnormal or arrested development of the bones.*—In the case of congenital clubfoot the direction of the head of the astragalus and the presence of excessive inward rotation of the bones of the leg are points of importance. Absence of the fibula or tibia, or parts of those bones, and a rudimentary patella, are occasional accompaniments. In paralytic feet excessive prominence of the cuboid in equino-varus is a feature of importance in estimating the time to be occupied in treatment.

Weymouth-street, W.

THE CIVIL RIGHTS DEFENCE COMMITTEE.—From the minutes of the last meeting of this energetic body we learn with pleasure that matters are progressing. Our space does not permit us to publish these minutes in full, but we trust that our readers, who must be quite conversant with Mr. Anderson's bitter and extraordinary experiences, will communicate with the committee at 5, Mitre-court, Temple, and learn from the literature there to be obtained how vitally most of the points which are contended for therein affect the profession.

NOTES ON TWO CASES OF TETANUS TREATED WITH TETANUS ANTITOXIN.[1]

BY DUNCAN MACARTNEY, M.D. GLASG.,
SURGEON TO THE DISPENSARY OF THE GLASGOW WESTERN INFIRMARY.

CASE 1.—A married woman aged about fifty, of a very obese habit, had an epitheliomatous growth removed from the left vulva on Aug. 27th, 1895. Everything went well till the evening of Sept. 4th (the eighth day after the operation), when she experienced some stiffness about the jaws. On the morning of the 5th she was unable to open them, and had besides intermittent pain. Her temperature and pulse were normal, and she felt well in every other way. A mixture of bromide of potassium and hydrate of chloral was ordered. The condition remained unaltered till the 8th, when her neck became stiff. On the 10th there were suspicions of spasms commencing in the upper part of the abdominal wall and passing up to the jaws, which then became firmly clenched together. During this time she could swallow, and was fed with milk. The pupils were contracted from the commencement of the symptoms. On the 11th her temperature rose to 100° F. (the first elevation noticed), and the pulse-rate was 112. Undoubted opisthotonos was now present, the spasms coming on at intervals of ten to fifteen minutes; they were, however, slight in degree. The previous night was the first on which she had lost sleep. She was removed to the Western Infirmary at 6.30 P.M., and stood the removal well. At 9 P.M. the temperature was 100° and the pulse-rate 108, with spasms every five minutes. The minimum dose of tetanus antitoxin (obtained from the British Institute of Preventive Medicine) was injected into four different places on the abdominal wall. The injection had no effect on the frequency or severity of the spasms, though the temperature fell to normal. The condition remained the same till 10 P.M. (one hour after injection), when the patient had a spasm which lasted two minutes, during which the face and hands were very cyanotic. She then became extremely pale and immediately died.

CASE 2.—A boy aged five and a half years was admitted to the Western Infirmary on Oct. 1st, 1895, suffering from injury sustained to his leg from a cart-wheel passing along the outer aspect of the ankle region. The tissues were severely bruised, though no bones were fractured. The part was thoroughly cleansed and dressed with sublimate gauze and a half box-splint applied. In a few days the part was seen to be bruised past recovery, and a circular slough between two and three inches in diameter had formed. Nothing unusual was noticed till 7 A.M. of the 8th (seven days after receipt of the injury), when the patient was seized with a violent spasm almost epileptic in its suddenness of onset, in which opisthotonos, firm contraction of the muscles of the neck, and the risus sardonicus were well marked. During the morning visit ten grains of chloral were administered, but only a small quantity was swallowed; then five grains of chloral were given by the rectum, which was retained. At 1 P.M. the temperature was 98·8° F., the pulse-rate 100, and the respiration 24. At 4.15 P.M. there was another spasm—slight, however—followed by one at 4.35 P.M. At 5.15 P.M. a severe spasm came on, at the beginning of which he gave a slight cry; opisthotonos and risus sardonicus were distinct. At 6 P.M. the patient was put under chloroform, and I dissected away the slough and the red marginal line round it, going down to the bone and tendon and clearing away every trace of diseased tissue that I could see. Before the effects of the chloroform had passed away I injected into the abdominal wall a fifth of the recommended dose (for adults) of the tetanus antitoxine solution. This was at 6.35 P.M. At 7.10 P.M. another spasm occurred. Within the next twenty minutes several short attacks came on, in two of which he turned completely round on his face. The temperature at this time was 98·4°, the pulse-rate 130, and the respiration 30. At 9 P.M. the temperature was 99 8°, the pulse-rate 144, and the respiration 38. At 10.30 P.M. a second similar dose was injected. Still, the spasms kept recurring at intervals of ten minutes. At

[1] A paper read before the Glasgow Medico-Chirurgical Society on Dec. 6th, 1895.

11 P.M. the temperature was 101·4°, the pulse-rate 152, and the respiration 48. The same conditions of recurrence of spasms, with a slight cry sometimes, continued till the morning of the 9th at 2.30, when, after being quite livid, his face became extremely pale and he asked to be lifted up a bit in his bed, when he quietly died in the nurse's arms. He had received a third injection an hour before death, when his temperature was 103 2°, the pulse uncountable, and the respiration 52.

A third case was brought to my notice by one of my colleagues who had attended to a man's injuries which were of a similar nature to those detailed in Case 2. Tetanus supervened a few days (three or four) after injury, and as soon as he was brought to hospital tetanus antitoxin was injected. The patient had two injections, six hours intervening. He died a short time after the second injection, nothing in the way of diminution of intensity of symptoms having been noticed. One fact—i.e., profuse perspiration—which did not occur in my cases, was noticed in this.

Remarks.—I have thought it well to publish these cases, because in the matter of a new mode of treatment it is, I take it, our duty, whatever the results may be, to bring out every fact that may be of use in determining the proper value of the treatment. The latter of my two cases gave all the signs and symptoms of a typical case of acute tetanus. The exhibition of the antitoxin, and the operative measures employed to aid it in its action, had certainly not the slightest effect, at least in a curative direction. The steady rise of temperature, the lividity followed by pallor, and the increasing frequency of the attacks were not affected, at least in the right direction. The first case was not quite the normal form. It, also, might be called acute; yet the termination of the case with a falling temperature was unusual. No urine was passed by either patient after the injections had been given. The examination of this secretion might throw some additional light on the action of the antitoxin.

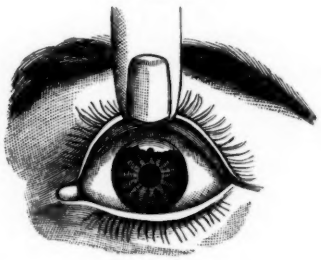
Glasgow.

THE ACCIDENTS OF LENS EXTRACTION.

BY CHARLES BELL TAYLOR, M.D., F.R.C.S.EDIN.,
HONORARY SURGEON TO THE NOTTINGHAM AND MIDLAND EYE INFIRMARY.

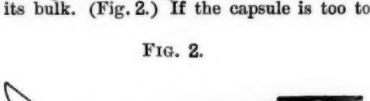
I DESIRE to supplement my remarks on the Accidents of Extraction in THE LANCET of Aug. 31st, 1895. If, in consequence of an extremely narrow chamber, mal-incidence of light, unruly conduct of the patient, or other accident, the point of the knife should pass into the pupillary area, and behind instead of in front of the distal portion of the iris, it must be withdrawn and freed before making the counter-puncture, and the section completed with the secondary knife or with scissors. If, in consequence of premature escape of the aqueous humour or delay in getting in front of the iris, it should obstinately fold over the edge of the blade, so that persistence on the part of the operator would inevitably entail mutilation, then the knife should be turned round so as to present the back of the blade to the protruding portion while the counter-puncture is effected; but if there is no objection to a slight iridectomy the knife may be pushed on so as to slice off a small piece of iris, or, by manipulation outside the cornea, the coloboma may be limited to the periphery of that membrane, leaving the pupil untouched and free in the anterior chamber. (Fig. 1.) Iridectomy accomplished in either of these ways is less painful, is less apt to provoke resistance on the part of the patient, and bleeding is less likely to occur than when the iris is withdrawn with forceps and snipped off with scissors in the usual way. This peripheral section of the iris, however accomplished, while preserving the pupil, is an effectual preventive of prolapse, and was first suggested by myself with that object in a paper which I read before the International Ophthalmological Congress at the Royal College of Physicians of London when last held in London under the presidency of the late Professor Donders. The wound for extraction should be peripheral, and the flap as large as consistent with safety. The lens starts easily with a large flap, and may on occasion be delivered with the capsule intact by manipulation with two spoons outside the cornea. The peripheral position of the incision sometimes entails a conjunctival flap which may bleed into the anterior chamber, and unless the blood is coaxed out before it coagulates will obscure the field of operation. Professor Hansen Grut of Copenhagen fears that this blood may prove a source of infection, but if loose and exposed coagula are, as is essential, carefully removed, there is no such danger, and the sanguineous fluid between the lips of the incision will seal up the anterior chamber and prevent prolapse of the iris by ensuring almost instant healing of the wound. If, as I have seen in cases of extreme myopia with semi-fluid vitreous, the vitreous should escape in quantity and the

FIG. 1.



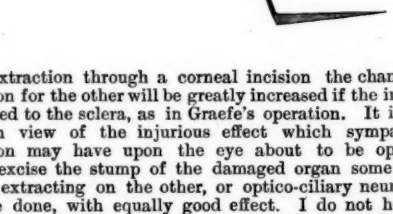
eyeball at once collapse, it is prudent in certain cases to limit the operation for the time to a slight iridectomy, extracting the lens later through a peripheral linear incision with a spoon. If, after completion of the section, from any accident the vitreous of normal consistence should gush forth and the lens sink behind the lower segment of the iris it should be instantly dipped out with the fenestrated loop which I use for this purpose, which is less rigid and more easily manipulated than the ordinary pattern, and which also possesses the unique advantage of assisting the exit of the lens without adding to its bulk. (Fig. 2.) If the capsule is too tough to

FIG. 2.



permit of incision by the pricker it should be withdrawn whole with forceps, leaving the iris intact, and the same procedure may be adopted at once after extrusion of the lens if it is evident that the capsule will interfere with subsequent vision. If the eye to be operated on is so sunken, or the brow so prominent, that it is difficult with the ordinary keratome to locate the incision with precision, it it well to use the knife with a deep elbow which has been made for me by Weiss for use in such cases. (Fig. 3.) If one eye has been lost

FIG. 3.



after extraction through a corneal incision the chances of salvation for the other will be greatly increased if the incision is limited to the sclera, as in Graefe's operation. It is well, also, in view of the injurious effect which sympathetic irritation may have upon the eye about to be operated on, to excise the stump of the damaged organ some weeks before extracting on the other, or optico-ciliary neurotomy may be done, with equally good effect. I do not hesitate to extract immature cataracts which interfere with vision in persons past middle life, but I am always careful in such cases to facilitate the exit of the lens entire by a large flap, and to avoid so far as possible the subsequent formation of inflammatory products in the pupillary area by limiting the incision of the capsule, as recommended by Knapp, to the periphery only of that membrane. If there should be lacrymal obstruction or anything like conjunctival discharge

or encrustration on the lids in cataractous subjects, it is most important that a healthy tone should be restored before operating. Pagenstecher destroys the lacrymal sac when there is purulent discharge, and Haab also recommends the obliteration of the puncta by the galvanic cautery. I have, however, found myself that probing (without slitting up the canaculus) and the use of astringents and antiseptics, especially that most potent of all, nitrate of silver, are sufficient to enable us to extract with safety. When it is necessary to excise the iris for any reason during extraction without a general anæsthetic, it may be rendered insensible in from one to two minutes by merely dropping a solution of cocaine on to the surface of the wound. Mr. Critchett, to whom we are indebted for the suggestion, conducts the solution into the anterior chamber by means of a grooved curette; but I have not found this necessary, and have always deprecated the injection of fluids into the anterior chamber. When, in spite of all efforts to extrude cortex, the pupil remains obstructed, grey, and sombre, the hyaloid fossa may on occasion be punctured, in which case the patient is much in the position of one whose lens and capsule have both been removed at one *coup* with a spoon. Of course, the most serious drawback to simple extraction is the possible occurrence of prolapse of the iris; as Pagenstecher says: "The operation is completed beautifully, and just as beautifully next day you find that the iris is prolapsed." This accident is caused by abnormal tension of the eyeball, by sudden outgushes of the aqueous humour, by faulty placement of the incision, by swelling up of retained cortex, and by spasm of the lids. Kalt of Paris endeavours to prevent prolapse by suturing the cornea, Galezowski by sealing the wound with an antiseptic wafer, Snellen of Utrecht by closing it with a conjunctival flap, and Knapp of New York by subjecting his patients to a series of tests immediately after extraction, performing iridectomy in those cases in which the iris shows a tendency to protrude. For my own part, I am satisfied if the edges of the wound are accurately in apposition, if the flap fits like a watch-glass, and the pupil promptly contracts; in these cases the anterior chamber is reformed at once, there is no gushing of aqueous or prolapse of iris, and, barring accidents, there will be none. But accidents will happen: "Against stupidity the gods themselves are powerless"; hence we are compelled to reckon upon a certain percentage of cases in which prolapse will occur; and, of course, if prolapse were a very serious accident its possible occurrence would be a fatal objection to simple extraction, but it is not a very serious accident. The great majority of the subjects of prolapse are no worse off than if iridectomy had been performed in the first instance, while, if the operation succeeds, then, indeed, the surgeon has something like success—the success which leaves nothing to be desired, which has nothing to fear for the future, and which restores the patient to society, not only with excellent vision, but with eyes which show no trace of operative interference. I presented patients, the subjects of double extraction by this method, to the notice of members of the Clinical Society of London in 1875, to the Medical Society and to the staff at the Royal London Ophthalmic Hospital and again to the members of the Ophthalmological Section at the jubilee meeting of the British Medical Association. Such eyes, according to my experience, bear the wear and tear of life much better than eyes operated on by the combined method, and of course sight is better (one patient on whom I operated for senile cataract twenty-six years ago is still alive and has excellent sight), and, Helmholtz and Donders to the contrary notwithstanding, accommodation is not abolished.[1] I have had patients able to read small print without glasses after extraction, and many more who can do so by a slight change in the position of their distance glasses, and all trace of operative interference is so conspicuously absent that patients of mine who have afterwards consulted eminent ophthalmic surgeons have quite naturally escaped detection. Of course, in this operation there is only one wound; in extraction with iridectomy there are two; hence in the latter case the traumatism and liability to infection are greater. Otto Becker's researches (post mortem) have shown that when iridectomy is done there is always prolapse at the angles of the wound,[2] and the lens capsule, as Mr. Swanzy warns us, is very apt to be trapped in the wound with the combined operation, an accident which never happens with simple extraction. The central and movable pupil, too, of course fulfils its natural function of regulating and excluding rays of light much better than one that has been deprived of a portion of its sphincter, and, as in aphakial animals, compensates for the absence of the lens. If suppuration should threaten after extraction, internal antisepsis, after the method of Vopelius, should be at once adopted.

Nottingham.

[1] See Foerster's Researches.
[2] See his Pathological Anatomy of the Eye.

OBSERVATIONS ON COCAINE ANÆSTHESIA.

BY J. JACKSON CLARKE, F.R.C.S. ENG.,
ASSISTANT SURGEON AT THE NORTH-WEST LONDON HOSPITAL, AND PATHOLOGIST AT ST. MARY'S HOSPITAL.

LIKE many surgeons who have much out-patient work, I have for some years past made extensive use of cocaine anæsthesia, and I venture to give my experience of it, for two reasons. The first is because I am convinced that in many cases the solutions, whether used for superficial application or for hypodermic injection, are insufficiently diluted, and the second because, of late, improvements in the composition of solutions for hypodermic use have been suggested.

The scope of the method.—As examples of the kind of operations to which my observations relate I may mention the removal of cutaneous tumours, such as rodent ulcer and sebaceous cysts of the scalp; circumcision; the excision of simple ganglia about the wrist and the ankle; the opening of deep abscesses, such as ischio-rectal and perineal abscesses, in cases where the skin is free from œdema and redness; tenotomies; the excision of tuberculous glands when free from deep adhesions; and also as a superficial application for the removal of tonsils and adenoids in adolescents and adults. The more serious operations are, in my opinion, unsuited to the method on account of unforeseen difficulties and complications which may arise and demand prompt and energetic measures, but in emergencies and exceptional cases—e.g., tracheotomy—cocaine may be used. As an example of the use of the drug in an emergency the case related by Mr. Hartley[1] is of interest; that surgeon successfully tied the external iliac artery after injecting a 2 per cent. solution. In parts to which the elastic band can be applied more latitude for the drug is obtained; thus Bryson,[2] using a 4 per cent. solution, performed double castration after surrounding the base of the scrotum with an elastic ligature.

Idiosyncrasy.—The smallest hypodermic dose which I have observed to produce faintness and nausea was one-tenth of a grain; this was in the case of a man aged sixty-five. I have found that old people are especially susceptible, and it is advisable in every case to have brandy and amyl nitrite at hand. Probably, as is the case with chloroform, degeneration of the heart is the condition most to be feared. The application of cocaine to mucous surfaces has given rise to fatal accidents. It must, however, be borne in mind that many cases attributed to idiosyncrasy have been due to the use of injudiciously strong solutions or to the injection of the drug directly into veins. With proper care, even in regions rich in veins, such as the lower part of the rectum, the method may be safely practised; thus Ricard[3] has operated for hæmorrhoids after producing anæsthesia by a 1 per cent. solution, the needle being plunged deeply into the tissues and gradually withdrawn as the injection was made.

Strength of solutions.—For some years I have employed a 1 per cent. solution for hypodermic injection and a 2 per cent. solution for mucous surfaces, but latterly, influenced by the experience of Schleich,[4] I have diminished the strength of the hypodermic injections. Schleich recommends a solution made up of cocaine hydrochlorate and sodium chloride, of each three grains; morphia hydrochloride, one-third of a grain; distilled water to three ounces—equivalent to a 0·25 per cent. solution. The sodium chloride was added, since it was found to diminish the pain caused by the

[1] THE LANCET, June 22nd, 1895.
[2] Journal of Cutaneous Genito-Urinary Diseases, July, 1895.
[3] Gazette des Hôpitaux, February, 1895.
[4] German Congress of Surgeons, July, 1894.

injection. Bransford Lewis[5] reports that, using this solution, he has found it possible to anæsthetise the corium, but in the deeper tissues the anæsthesia was not perfect. This has been my own experience, and latterly I have used a ½ per cent. solution in removing a rodent ulcer of the nose and in other minor operations with complete satisfaction. It is impossible to keep weak solutions for any length of time without fungi appearing in them; therefore it is preferable to make the solution fresh from the solid drug for each operation. For this purpose Messrs. Allen and Hanburys have kindly made for me pellets, each containing one grain of cocaine hydrochlorate and half a grain of common salt. One such pellet dissolved in three drachms of boiling water gives a sterile ½ per cent. solution, which is cooled by placing the vessel in cold water or on ice. Tested on myself, it produced in one minute complete anæsthesia, which lasted exactly a quarter of an hour. When the elastic band was used the anæsthesia was complete for twenty minutes, and after the band was removed at the end of this time the anæsthesia lasted ten minutes longer.

The method of making the injections.—When injections are made for the purpose of anæsthetising the skin, the corium should first be filled with the solution. This is accomplished by using a very fine needle and introducing it almost parallel to the surface of the skin. A few drops are injected, causing a slight wheal to appear, and after a pause of a few seconds the needle is pushed further, and the process is repeated until the whole of the corium is infiltrated. The subcutaneous and deeper tissues are to be treated in a similar way. This method has been described in detail by Schleich, but it has been used by many surgeons, including myself, for years. The merit of showing the anæsthetic effect of fluids injected into tissues so as to cause pressure on the nerves, and the suggestion of making the addition of common salt to solutions of cocaine, apparently belong to Schleich. There is, however, a limit to the desirable degree of infiltration. If the wheal produced by the entry of the fluid into the tissues is very tense the parts remain tender and the skin red for over twenty-four hours.

The elastic band.—As the result of a personal experiment I can say that for the first five minutes the band gives rise to but little discomfort, but after that the discomfort increases, until at the end of twenty minutes I was glad to get it off. In an operation which can be completed within fifteen minutes the band is not necessary, but in old people it is advisable to apply the band until after the chief incisions have been made, so that the tendency to absorption of the drug is diminished. In some cases the band is required in order to secure a wound unobscured by blood. If the band is used for more than a quarter of an hour tenderness and redness follow in the part which has been subjected to the action of cocaine.

Other details.—It need hardly be mentioned that perfect antiseptic precautions should be observed, yet some cases have come to my notice in which subcutaneous abscesses &c. have followed hypodermic injections of cocaine. These have been due to the lack of simple precautions. An ideal syringe should be capable of being placed in boiling water with the other instruments, and at the same time should be perfect as a hydraulic machine. The syringe I have used for some years without any mishap answers the second, but not the first, of these requirements. By using it solely for the one purpose, and by cleansing it with a 5 per cent. carbolic solution before and after each operation, it has been kept aseptic. It is also kept in an air-tight metal case, which keeps the piston moist. The instrument was made for me by Mr. T. Hawksley, who has also brought to my notice two other instruments—one with a solid steel piston fitted with cork; this can be placed in boiling water without detriment, but the cork fittings would, in my opinion, be liable to wear and become defective; the other is the instrument used for mercurial injections in syphilis—it has platino-iridium needles and an ingenious rubber piston (the latter would prevent its being sterilised by heat). A perfect syringe has, I think, yet to be found.

Substitutes for cocaine.—Lucas Championnière has recently suggested guaiacol dissolved in olive oil as a substitute for cocaine. I have tried on myself a solution of thirty grains in one ounce of olive oil, and find it produces anæsthesia, but causes considerable swelling; and, whilst in the central part of the swelling there is anæsthesia, there is much smarting at the peripheral part of the area into which the fluid has been injected. The smarting lasts much longer than the anæsthesia. I am not, therefore, inclined to try this drug on patients.

Old Cavendish-street, W.

[5] Journal of Cutaneous and Genito-Urinary Diseases, July, 1895.

Clinical Notes:

MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

TWO CASES OF REVOLVER ACCIDENT.

BY FREDERICK PAGE, M.D. EDIN., M.R.C.S. ENG.,
SURGEON AND JOINT LECTURER ON CLINICAL SURGERY, NEWCASTLE-ON-TYNE ROYAL INFIRMARY.

A LAD aged seventeen years was admitted into the Royal Infirmary, Newcastle-on-Tyne, on Feb. 6th, 1895, in a very critical condition, his left chest being full of pus, the result of a pistol accident fourteen days previously. Over the apex of the heart there was a small entrance wound; the ball was lodged in his chest. The apex-beat was felt under the right nipple. Thirty ounces of pus were at once drawn off by aspiration, and three pints were drawn off the next day by the same means. On the following day, the lad being much improved, the chest was incised and drained without chloroform; thirty ounces of pus escaped. On May 10th a portion of the seventh rib was removed to permit of better drainage. On June 6th the lad left the hospital in a fairly satisfactory condition, gaining strength, in good spirits, and with about one drachm of discharge daily escaping through the tube.

Remarks.—One interesting point in the case is, Where is the ball lodged? The lad never spat any blood; fluid quickly accumulated in the chest after the accident, but without marked symptoms, apparently, till the quantity was very large, and on admission he was too ill to have his chest incised or to take chloroform. Two weeks after leaving the infirmary he had a troublesome attack of hysteria, during which he refused food and had to be fed by the stomach-pump, resisted being dressed, had retention of urine, bit and scratched and kicked, and altogether behaved like a maniac. The attack lasted some four or five days. Since then his progress towards recovery has been satisfactory, and he is now strong and well.

Since writing the above I have had a second patient under my care suffering in a similar manner. A lad aged seventeen years was admitted into the Royal Infirmary on Dec. 22nd, 1895, suffering from internal hæmorrhage, the result of a bullet wound received two hours previously. While the patient's father was explaining to him the action of a revolver the weapon exploded and the ball entered his abdomen a little above the pubes; it could be felt lying under the skin of the left buttock. On opening the abdomen it was found to contain a large quantity of blood. The bladder was full of clot, and there were four perforations of the small intestine. The ball had passed out of the pelvis through the left sacro-sciatic notch, injuring an artery in its neighbourhood, probably the gluteal or a branch of that vessel. The bladder and abdomen were freed from blood, and an attempt was made to find the wounded artery, but this was unsuccessful, and at last the common iliac artery was ligatured. The injured gut was resected and the ends sutured, Allingham's bobbin being used. The ball was then extracted and a large drainage-tube introduced into the pelvis from the buttock wound alongside the bladder. The peritoneal cavity was carefully sutured so as to shut it off as completely as possible from the bladder, and the wound closed. Transfusion of hot saline fluid was performed during the operation. The lad rallied and was able to give a full account of the accident. At 4 A.M. on Monday, Dec. 23rd, however, he began to sink, and died during the morning. This is the second serious revolver accident which has been treated at the Royal Infirmary during the last few months. In the other case, reported above, a youth aged seventeen accidentally shot himself with a toy revolver, the ball entering his chest over the apex of the heart; empyema followed, from which he has only just now recovered.

Newcastle-on-Tyne.

TWO CASES SHOWING CHEYNE-STOKES RESPIRATION IN CONNEXION WITH THE ADMINISTRATION OF CHLOROFORM AND MORPHINE.

BY L. A. PARRY, M.B., B.S. LOND.,
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THE only two examples of Cheyne-Stokes respiration under the influence of a general anæsthetic with which I have met both occurred in patients who were anæsthetised with chloroform in conjunction with morphine. The first case was that of a man aged seventy-six, who was suffering from an epithelioma of the tongue with secondary deposits in the glands of the neck. The glands were first removed, laryngotomy was then performed, and, finally, the tongue excised by Whitehead's method. Five minutes before commencing the administration of chloroform I injected subcutaneously one-fourth of a grain of morphine and one two-hundredth of a grain of atropine sulphate. Some time after the beginning of the operation the patient developed typical Cheyne-Stokes respiration; this lasted throughout the surgical procedures, which occupied eighty-five minutes, and then soon passed off. Eleven drachms of chloroform were used. The second case was that of a man who was suffering from some cerebral complications of otitis media. Morphia was injected previously to the commencement of the inhalation of chloroform. The patient soon developed Cheyne-Stokes respiration, which lasted till death some hours later. I was told that some form of respiratory difficulty, which was very likely Cheyne-Stokes respiratory rhythm, had been noticed between the injection of morphine and the administration of chloroform. It is, indeed, highly probable that the morphia was the main agent in the causation of this condition in both cases.

South Norwood-hill, S.E.

ETHYL CHLORIDE IN HYSTERICAL APHONIA.

BY ALFRED KEBBELL, M.R.C.S. ENG.

I HAVE found the application of ethyl chloride to the nape of the neck most efficient in the treatment of this troublesome affection. It is applied suddenly, to the extent of making a frozen patch the size of a shilling, and repeated if necessary. It is useful, because more convenient than the application of electricity. The results in the two cases given confirm, I think, my opinion. The first case was that of a dark-complexioned young woman, of a highly emotional disposition, who sent for me in consequence of being unable to speak above a whisper. As I was some distance from home and had no battery with me, it occurred to me to try the application of some chloride of ethyl. I applied it suddenly over the middle of the neck, with immediately favourable results. She had one or two relapses, but was always at once relieved by its application. So impressed was she with its efficiency that she asked for a flask of the chloride and got a companion to apply it for her when necessary. The second case was that of a tall, highly nervous married woman about thirty-five years of age, who, after a severe domestic trouble, had completely lost her voice. One application to the nape of the neck quite restored the voice, which she has not lost since.

Flaxton, York.

THE HOWARD ASSOCIATION AND WORMWOOD SCRUBBS PRISON.—The committee of the Howard Association, London, at their January meeting (Mr. W. W. Baynes, J.P., in the chair), adopted the following resolution:—"The committee of the Howard Association have learnt with pleasure that amongst several improvements recently introduced into local jails, the authorities have ordered Wormwood Scrubbs Prison to be specially devoted to the reception of first offenders from the metropolitan district, in order to separate them, as a class, from criminals imprisoned more than once. The committee hope that the Home Secretary and the Prison Commissioners will take the further much-needed step of discontinuing the overcrowding of prisoners in the workshops of Wormwood Scrubbs, which is being permitted in contravention of the existing Prison Acts."

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. THOMAS'S HOSPITAL.

TWO CASES OF HYDROCELE OF HERNIAL SAC.

(Under the care of Mr. WILLIAM ANDERSON.)

MOST hospital surgeons have met with examples of the condition described in the cases of which we publish the following notes. Still, it is a rare condition and one of practical importance. Usually produced by the adhesion of the omentum to the lining of the sac in consequence of inflammation, intestine may become adherent and similar results follow. Adhesion of the two layers of the sac which are in contact may also ensue in consequence of the pressure of a truss, and, by the pressure of the hernia above and the accumulated fluid below, the adherent part may assume the character of a distinct membrane. Should the hernia above become adherent, then it is possible that there may be a double hydrocele, as in a case of femoral hernia which we have published in the columns of THE LANCET.[1] It is a rare complication of femoral hernia, as Mr. Langton had at that time only met with it once out of almost 7000 cases of femoral hernia treated at the Truss Society in a period of eighteen years.

CASE 1. (From notes by Mr. L. Gilbert.)—A man aged thirty-six years was admitted into St. Thomas's Hospital on Oct. 19th, 1895, with a large swelling on the left side of the scrotum. The patient was a strongly built man in fair health. He stated that about sixteen years previously he had noticed in the position of the external inguinal ring a small swelling. This increased slowly in size, and about a month before his admission had attained the dimensions of a turkey's egg and extended into the scrotum. It was occasionally reducible and had never caused any trouble. On the morning of Sept. 25th the tumour suddenly increased in size and became very hard and tender. It grew larger daily and caused a good deal of pain, but no constitutional or functional disturbance. On examination there was found a large oval swelling, about the size and shape of an ostrich's egg, occupying the right side of the scrotum and reaching upwards into the inguinal canal. It was tense, fluctuating, and translucent at its lower two-thirds, solid and opaque above, and there was a slight impulse on coughing. It was somewhat tender and hot and quite irreducible. An operation was performed by Mr. Anderson on Oct. 23rd. An incision was made into the front of the tumour, a little below its middle, and on piercing the sac there escaped a gush of about fifteen ounces of turbid, straw-coloured fluid with a faint, unpleasant odour. The sac-wall was thickened and opaque, and occupying its upper third was felt a doughy mass of omentum. Before proceeding further the cavity was well washed out with a weak perchloride of mercury solution. The incision was then carried upwards. The exposed omentum was of very large size, very vascular, and firmly glued to the sac-wall by recent lymph. The adhesions were broken down by the finger, and the mass, which was repeatedly irrigated with antiseptic fluid during the operation, was drawn down until the healthy omentum was reached. Through this were passed silk ligatures, and the structure was tied in eight segments well above the line of incarceration. The inflamed portion of the omentum was then cut off; the stump, after being washed with perchloride solution, was returned into the abdomen; and the sac was isolated, ligatured at the level of the internal ring, and cut off below the ligature. Finally the incision was united by means of silkworm gut sutures. The wound healed by first intention, and the patient was discharged on Nov. 10th.

CASE 2. (From notes by Mr. J. N. Walker.)—A man

[1] THE LANCET, Feb. 26th, 1887.

aged thirty-three years was admitted on Oct. 28th, 1895, with a large scrotal tumour on the left side. The patient said that he had had, since infancy, a swelling in the inguinal region which underwent occasional increase in size, but could never be completely reduced. It did not, however, cause any functional disturbance. Eight days before his admission the tumour without apparent cause became tense and painful, and grew rapidly larger, but still without intestinal symptoms. On examination a tense oval tumour, with a fairly distinct impulse on coughing, was found extending from the left inguinal canal nearly to the bottom of the scrotum. The testicle could be felt with some difficulty at its lower and back part. The upper part of the tumour was opaque and appeared to be solid; the rest was translucent and fluctuating. Mr. Anderson operated on the 31st. The details of the operation resembled those in Case 1, and the condition revealed was similar, except that the adherent omental mass was smaller, the effusion in less quantity, and the sac-wall more thickened by the pre-existing inflammation. The omentum was ligatured in three segments and as the inflamed sac could not be isolated from the surrounding tissues it was divided below the external ring, and the upper segment was stripped up as far as the internal ring and ligatured. The lower portion of the sac was left *in situ* after being swabbed out with carbolic acid lotion. In this case, as in the last, the testicle was outside the sac. The wound was found to be healed a week later, when the dressings were removed. The patient was discharged on Nov. 25th.

Remarks by Mr. ANDERSON.—The condition exemplified by the preceding cases is somewhat rare and, by reason of its rarity, may easily escape a correct diagnosis until the question is settled by the knife of the surgeon. The points for observation are (1) the history of a scrotal tumour, at first partially or completely reducible, but becoming irreducible after undergoing a sudden and painful enlargement; (2) the extension of the tumour into the inguinal canal; (3) the presence of impulse on coughing at the external inguinal ring; and (4) the opacity of the upper part and translucency of the lower part of the swelling. Where the neck of the sac contains intestine instead of omentum there are likely to be symptoms of incarceration of a more or less severe type, the impulse on coughing would be more distinct, and a resonant percussion note might be detected over the imprisoned gut. In these cases the origin of the inflammatory attack that led to the fixation of the hernial plug into the upper portion of the sac and the rapid accumulation of fluid below was uncertain, since there was no history of violence, and no extravasation of blood or other indication of injury was evident at the time of operation. The treatment is simple, but it is desirable that inflamed omentum should be entirely removed, and that intestine, if present, should be carefully disinfected with a solution of perchloride of mercury or some other agent before its return, and none of the inflammatory fluid should be allowed to pass into the abdominal cavity.

DERBYSHIRE ROYAL INFIRMARY.

INTESTINAL OBSTRUCTION DUE TO OVARIAN TUMOUR.—POST-PHARYNGEAL ABSCESS.

(Under the care of Mr. CURGENVEN and Mr. J. A. SHARPE.)

ROTATION of the pedicle of an ovarian tumour is not of uncommon occurrence, but usually takes place when the pedicle is of fair length and the tumour has escaped from the pelvic cavity. The rotation in this case appears to have interfered as usual with the return of the venous blood from the tumour, and caused a condition of partial gangrene. It also probably caused a very considerable enlargement in size of the whole tumour and its impaction in the pelvis in consequence of the shortness of the pedicle. This impaction with increasing swelling gave rise to the condition for which operation was required—one of mechanical obstruction of the bowel. The second case is a typical one of post-pharyngeal abscess in most of its aspects—the age of the patient, the urgent dyspnœa, and the swelling of the neck, most marked to one side; the only unusual character about the case was the pointing of the pus in the neck. These acute abscesses nearly always break and discharge their contents into the pharynx. Dr. Edmund Simon has pointed out the presence of two lymphatic glands in the retro-pharyngeal tissue, one on each side of the middle line, in early childhood, and considers that they disappear after the third year. This accounts for abscess in this region (unless due to spinal caries) generally occurring in patients under four. For the notes of both cases we are indebted to Dr. C. H. Taylor, house surgeon.

Intestinal obstruction caused by an ovarian cyst which was impacted in the pelvis.—A married woman aged fifty-seven years was admitted to the infirmary under the care of Mr. Curgenven on March 19th, 1895, having had complete obstruction of the bowels for three days. Her history was most indefinite. She thought she had increased in size, but was not sure that any distinct tumour had ever been felt. For some months she had had pain in the left side and an increasing difficulty with her bowels. She was very stout, with a large amount of adipose tissue, and slightly jaundiced. The abdomen was enormously distended, rather more so on the left side, but nothing was made out by palpation. On percussion it was resonant in the right flank but dull elsewhere. Rectal examination revealed nothing. Enemata having been administered with no relief, and the patient's condition appearing to be serious, it was decided to open the abdomen in order to find a possible cause for the obstruction. The usual incision in the middle line through one inch and a half of fat revealed a large ovarian tumour and much ascitic fluid. The cyst on examination was found to be completely rotated at its pedicle, so much so that the left ovary was already gangrenous, and considerable hæmorrhage had taken place into the broad ligament. The rotation of the tumour, probably caused by the passage of intestinal contents along the descending colon, had led to its impaction in the pelvis and so by pressure caused the obstruction from which alone the patient appeared to suffer. The cyst was removed and the wound stitched up. On March 20th there was much distension and the sickness continued. A turpentine enema followed by saline aperients relieved both. On the 26th the wound was dressed and the stitches were removed. On the 28th an unexpected violent sneeze caused the wound, in spite of strapping and binder, to give way, intestines and omentum being found under the dressing. After careful cleansing these were returned and the wound was restitched with silkworm gut. On April 11th the wound was again dressed and the stitches were removed. The wound healed, and on the 29th the patient was discharged in good health, wearing an abdominal belt.

Post-pharyngeal abscess; unusual course.—A female child aged ten months was admitted to the infirmary on Feb. 26th, 1895, under the care of Mr. J. A. Sharp, in a moribund state, having been ailing for four days. There was no history of diphtheria. The breathing had become difficult only during the last twenty-four hours. The neck appeared to be generally swollen. No definite cause for the tracheal obstruction could be made out, however, so tracheotomy was at once performed, affording relief. The temperature fell next day. The swelling in the neck appeared to be more distinct on the left side. Two days later a sense of fluctuation could be obtained on making deep pressure. A careful dissection was made on the left side through the skin, &c., and dressing forceps were pushed on until pus was found lying between the œsophagus and transverse processes of the cervical vertebræ. A drainage-tube was then inserted. The abscess cavity gradually closed, the tracheotomy tube being removed on the day after evacuation of the pus, and the child made a good recovery.

LIVERPOOL MEDICAL INSTITUTION.—At the annual meeting held on Jan. 9th, 1896, the following list of officers, members of council, and members of the Pathological and Microscopical Committee was adopted:—President: Richard Caton. Vice-Presidents: W. Macfie Campbell, G. G. Hamilton, Charles H. Shears, and Robert Jones. Hon. Treasurer: Armand Bernard. Hon. General Secretary: R. S. Archer. Hon. Secretary to Ordinary Meetings: T. B. Grimsdale. Hon. Librarian: K. A. Grossmann. Council: R. J. Hamilton, R. W. Murray, H. G. Rawdon, W. T. Thomas, R. Williams, A. H. Wilson, R. Robertson, H. W. Knowles, Charles Macalister, J. H. Abram, Hugh E. Jones, and A. Stookes. Auditors: John Johnstone and W. P. Thomas. Pathological and Microscopical Committee: J. H. Abram, F. H. Barendt, A. Barron, Rubert Boyce, A. W. Campbell, T. B. Grimsdale, G. G. Hamilton, F. C. Larkin, J. R. Logan, R. W. Murray, F. T. Paul, W. T. Thomas, and J. Wiglesworth.

Medical Societies.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Renal Colic in Infants.—Prevesical Abscess.

AN ordinary meeting of this society took place on Jan. 14th, Mr. HUTCHINSON, President, being in the chair.

Dr. R. A. GIBBONS read a paper on Renal Colic in Infants. In this paper he gave details of cases occurring in infants between nine and twenty-three months, in which all the symptoms of renal colic were present. In none of the patients was a distinct calculus found, but there was abundance of free uric acid, and small masses of mortar-like material passed consisting of uric acid. In all the cases detailed there was a strong family history of gout. From the facts brought forward it was clear that the affection was more rarely met with in the infants of the poor, and that the cause of this was due to the greater tendency to the inheritance of gouty conditions amongst the wealthier classes, the latter being more prone to the formation of uric acid and to suffer from conditions classed under the name "gouty." Dr. Gibbons believed that the subject had not previously been brought before the society, owing to the fact that such cases as those described in the paper, although extremely rare, had been probably taken for severe cases of intestinal colic. The points to which he desired to draw special attention were: (1) that in these cases there was suddenness of onset of all the symptoms; (2) that there was nothing observable about the general condition of the children, and especially the urine, before the attack to lead those in charge to seek medical advice; (3) that they had all the signs and symptoms of acute renal colic; and (4) that they all occurred in infants who were the offspring of gouty parents.—The PRESIDENT was not quite certain that these cases were true renal colic, for the diagnosis between this condition and intestinal colic was so very difficult in infants, and then, again, in none of the cases was true calculus found. It was a curious fact that the children of the better classes never suffered from calculus in the bladder. Brodie, Cadge, and others confirmed this observation, and he himself had never operated in private for vesical calculus in a child. The children of the rich nevertheless suffered a good deal from uric acid. As to dieting of children, he thought it should be insisted that table salt in sufficient quantity should be taken in food; this was a simple expedient which had been proved of help in keeping the uric acid in solution.—Mr. J. H. MORGAN was much interested in the paper because of its bearing on the question of the occurrence of stone in the poor and its absence in the rich. It was well known that uric acid crystals were frequently found in the kidney of the fœtus and in the urine, but no symptoms of their presence had been observed. Why was it that these children who suffered with renal colic as infants did not suffer with calculus until after they were two years of age? Was it that the collections of crystals passed away coated with mucus and so were kept soft, or were the masses retained, causing no irritation until, by accumulation, they reached a size large enough to give rise to symptoms of stone? Though in all the cases related the presence of blood and of crystals were associated together, in none of them was pus found. Perhaps it was that the crystals lacerated the mucous membrane and then passed away without further irritation. He felt sure that symptoms such as had been described must exist amongst the children of the poor, and now that they had been pointed out they would be no longer confounded with intestinal colic.—Dr. LEONARD GUTHRIE regarded the cases which had been related as instances of true renal colic, and the actual finding of a calculus was immaterial in the face of the microscopic examination of the urine. He was of opinion that these symptoms were very common amongst the children of the poor, who frequently showed evidence of the uric acid diathesis with pains in the abdomen, often referred to the umbilicus, or to the right or left hypochondrium, or to the right or left iliac or lumbar regions, and there might be tenderness over the area of pain. There also might be hæmatinuria, hæmaturia, or albuminuria, or irritability of the bladder with incontinence of urine, or supra-pubic tenderness, or penile pain might be complained of. There might be tonsillitis, pericarditis, endocarditis, joint pains, skin affections, or other evidence of rheumatic complaint. In cases of colic in the children of the rich a medical man would be sent for at once, but in the children of the poor the pains would be put down to teething or to want of food. The urine of infants was often difficult to obtain for purposes of examination, but an inspection of the napkin might show a reddish-pink colouration, and examination with a lens might discover crystals of uric acid. He wondered why Dr. Gibbons did not include the ordinary uric acid cases in his paper, for they were only different in degree from the cases of colic. As to the question of gouty inheritance, gout was uncommon among the poor, and this train of symptoms was associated rather with the rheumatic diathesis.—Dr. JOHN HARLEY remarked on the difficulty in obtaining specimens of urine from young children. He had no doubt that the cases described were instances of renal colic, the sudden onset of the symptoms and the sympathetic vomiting being characteristic. He did not hear Dr. Gibbons advocate the use of henbane in these cases. He regarded this drug as a sheet-anchor in relieving the pain and spasm of the involuntary muscle of the urinary tract, and it might advantageously be combined with opium.—Mr. R. W. PARKER said that his own experience of this class of cases was *nil*, and he thought that they must occur among the rich rather than among the poor. An amount of evidence had been brought forward which could not be gainsaid to show that renal colic might occur unassociated with the passage of stone.—Dr. GIBBONS, in reply, said that as all the cases which he had related had occurred in infants it was difficult to give table salt, though he believed that this was most valuable in older children. Only one of the cases he had related occurred in hospital practice, and then he was able to witness the actual paroxysm; but he had heard of other cases in hospital practice which he believed to be of the same nature. Though no actual hard calculi had been passed, yet small, soft pieces of calculous matter had been voided, and these he believed were sufficient to cause colic. Cases of uric acid diathesis were common enough, and few physicians failed to recognise them, but he did not wish such cases to be confounded with those related in his paper. He had not tried the use of henbane because he had found that the cautious use of opium gave as satisfactory a result as any drug that could be employed. He emphasised the fact that urine could be easily collected from infants by an intelligent nurse, and that four or five drachms were sufficient if a small urinometer and large test tube were used. He had examined urine collected from infants under one month old.

Dr. ERNST MICHELS read a paper on Prevesical Abscess. Abscess in the prevesical space was rare, only a few cases being described in French and German literature. The paper was based on the observation of four cases, all of which had given great difficulties, especially with regard to diagnosis. The prevesical space was defined anatomically, and the etiology of prevesical suppuration was discussed. Stress was laid on the fact that the source was not so often to be found in the bladder or prostate gland, but rather in diseases of other pelvic structures, chiefly the pelvic bones. The most prominent symptoms were pain in the pelvic region, frequency of micturition (the urine being healthy at the time), and the formation of a pelvic tumour resembling very much a distended bladder. After a time the abscess broke through the boundaries of the prevesical space, and might spread through the whole pelvis; it might break into one or several of the pelvic structures. The great interest of these cases lay in the difficulty of their diagnosis; during the initial stage the symptoms were much too vague to allow of a certain diagnosis; later the cases were often diagnosed as pelvic new growths. In all the four cases observed diagnosis was very difficult and mistakes had occurred. Even the use of the aspiration needle, which was of very great help, might fail to lead to a correct diagnosis. The treatment was difficult and tedious. Free incision and drainage were obviously required, but the abscess might spread through the pelvis in spite of very energetic treatment. If the abscess had broken through the transversalis fascia, and pointed in the anterior abdominal wall, it assumed the form of an abscess *en bissac*, one part lying superficially to the transversalis fascia, and the other part deep in the pelvis; the communication between the two portions might be very small, and special attention was required to find it and enlarge it sufficiently. The final

result depended largely upon the primary cause of the abscess; in any case very slow healing must be expected. A short history of the four cases observed was given.—Dr. KENNETH MCLEOD said that in India he had met with several cases of prevesical abscess, and many of them were very large, in one case extending up to the umbilicus. Diagnosis was made by means of an exploring trocar, and this was followed by a free opening above the symphysis pubis and subsequent drainage. The true prevesical abscesses were usually symmetrical, extending equally on both sides of the middle line, and in natives of India did not appear to be especially connected with disease of the urinary organ; they appeared rather to have a pyæmic origin and to be associated with malaria.—Dr. MICHELS, in reply, said that these cases seemed to be more frequently met with in hot climates, for there were very few indeed published in English, French, or German literature. The cases which gave rise to difficulty in diagnosis were those which were solid at first, for their solid feel made the surgeon timid in using a trocar for purposes of exploration.

MEDICAL SOCIETY OF LONDON.

Prevention and Treatment of Insanity of Pregnancy and the Puerperal Period.

AN ordinary meeting of this society was held on Jan. 13th, the President, Sir JAMES CRICHTON BROWNE, being in the chair.

Dr. GEORGE H. SAVAGE read a paper on the Prevention and Treatment of the Insanity of Pregnancy and the Puerperal period. He said that the subject was wide, appealing to special and general practitioners. The simplest and most natural classification was into mental disorders. 1. Occurring in pregnancy—(*a*) in the earlier months, including certain cases which came on immediately with pregnancy; and (*b*) cases coming on during the later months of pregnancy. 2. Insanity of labour—(*a*) hysterical and transient; and (*b*) more lasting or permanent. 3. Ephemeral insanity associated with febrile disorder on the onset of milk, which might pass off or might lead to acute delirious mania. 4. Insanity coming on within the first fourteen days after labour. 5. Insanity coming on between that date and six weeks after labour. And 6. The insanity of lactation and that of weaning. As a rule recurring attacks in the same patient, whether preceding or following parturition, were similar, and the same person was liable to suffer from either of the forms named. There was no special definite form of insanity deserving the name "puerperal mania." The predisposing causes for all the forms of disorder were similar; heredity was the most important factor; this might be direct, mother and daughters having alike suffered from puerperal insanity. He did not find that many women who had suffered from puerperal mania had had grave hysteria, though a small number had had attacks of insanity before the puerperal one. It was a question how far they were justified in recommending marriage in the case of hysteria, and, on the other hand, how far they were right in trying to prevent such marriages. First pregnancies, especially if they occurred after the age of thirty, were more dangerous than earlier pregnancies. It was still a doubtful point as to the influence of illegitimacy on the production of puerperal mania. Previous attacks were very powerful causes of later ones, the danger being directly connected with the recency of the attack. Insanity might be the first symptom of conception. "Longings" of pregnancy might be insane or might replace insanity, or might lead on to insanity. The insanity of the earlier months often passed off naturally with quickening; that of the latter months rarely passed off with delivery. He did not think that the induction of premature labour as a cure for insanity was often justifiable. During delivery there might be hysterical outbreaks which might occur with each pain and which might pass off after labour, or which might leave a patient more or less unstable for days, or might even lead to mania. In some cases the administration of chloroform might lead to a similar disorder, and it was noteworthy that some persons had puerperal insanity when they had had chloroform during delivery. Ephemeral mania might occur within a few days of delivery, associated with feverish symptoms, the whole being due to onset of milk, and be relieved by a purge; this mania might, however, be the earliest stage of delirious mania. True puerperal insanity might depend on sepsis and then had to be treated as sepsis, the mental disorder being of secondary import. Within the first fortnight of delivery maniacal symptoms were most common with puerperal mania. If the insanity developed later it was more often melancholia. The ordinary symptoms of this disorder were well known; he only referred to the sleeplessness, refusal of food, dislike to friends and surroundings, and, later, the occurrence of eroticism. The questions involved were certification, removal from home, and removal to an asylum. The attacks could not be cut short by hypnotics, and he referred to the drugs which should be employed. The time taken for recovery varied from a few weeks to months. In many cases the bodily health improved long before the mind; in many others removal from home or at least frequent changes in the surroundings were advisable. Return home was very important, and then arose the risk of recurring pregnancies; these should be avoided for some years. About 8 per cent. of patients died from puerperal insanity; nearly 20 per cent. remained more or less permanently weak in mind. General paralysis of the insane might occur with puerperal insanity and might not interfere with pregnancy or delivery. Insanity following lactation or weaning was associated with great weakness and was generally of a melancholic type and was very curable. The practical points of the paper were: the marriage of neurotics and the danger involved; the danger of childbearing in such persons; the question of inducing premature labour in insanity of pregnancy; the classification of the forms of the disease; the recognition that there was no specific type of the disease, such as puerperal mania; the question of certification and home or asylum treatment; and the question of prevention of pregnancy in women who have had puerperal mania.

The PRESIDENT said that his own experience of puerperal insanity and the insanity of pregnancy was archaic, as he had not seen a case for twelve years. There was yet a great deal of vagueness and indefiniteness about the subject which needed clearing up. He did not think, for instance, that Dr. Savage's classification was satisfactory, for his arrangement included alike etiological, symptomatic, and periodic causes, and the latter was an especially unsatisfactory classification. He was at one with Dr. Savage as to the septic group, and to this group, perhaps, ought to be ascribed the name "puerperal insanity." These cases were easily recognised when going round the wards of an asylum, with their flushed faces and the restless activity of subacute mania. This class appeared to be diminishing, which was due to the effects of modern antiseptic treatment in midwifery. He ridiculed the idea that patients could fix the time of conception to a day, and said that such an attempt on the part of the patient might of itself be almost regarded as one of the earliest signs of insanity. As to the influence of illegitimacy in producing insanity, whilst the moral conditions, on the one hand, might contribute to depression, yet, on the other hand, many of the women who fell in this way were of strong animal passion and, coincidently with this, had a strong physical development and hence were not so prone to insanity as degenerates. He thought that Dr. Savage was rather too apt to seize upon the puerperium and connect it with the insanity. But they did not refer to measles occurring during the puerperium as "puerperal measles," or a pleurisy occurring at that time as "puerperal pleurisy." Speaking broadly, insanity might be due to changes in the blood or to changes in the nervous system occurring in neurotic subjects, but it was strange that in neurotics, when they were exposed to strain, practitioners often did not see the overthrow they might be led to expect. He quoted two cases to illustrate this. Two girls, both of whom had had attacks of hysterical mania, became married and had several children without losing balance, though one broke down later at the menopause.

Dr. BLANDFORD remarked that this was one of the most curable forms of insanity, the recoveries being something like 80 per cent., and these figures, it should be remembered, had been based upon cases admitted into asylums and hence probably only included the severer cases; if the cases treated at home were included the figures of recovery would be much higher. He felt sure that mere hysteria did not result commonly in puerperal insanity, and the cases of insanity of childbirth which he had seen had usually followed previous attacks of insanity. It was remarkable that in most of the cases the first symptom was sleeplessness, and with regard to this symptom practitioners were much at the mercy of the nurse, who alone could give a statement as to the

amount of sleep, and on whom often much depended to promote sleep. Some women were bad nurses because they were always talking at night, or were poking the fire, or bringing the child to the mother to be nursed. If a patient was sleeping badly after a confinement the production of sleep by a drug was of benefit, as it might cut short the oncoming of an attack. When mania set in, hypnotics would not much influence the course of the disease, though they might save life in acute cases by the production of sleep. In other cases mania seemed to pass off quicker when no drugs at all were administered.

Dr. HERMAN said that he thought that there was such a thing as "puerperal insanity," which was characterised by its curability. Women who possessed a nervous system liable to break down were those most likely to suffer from puerperal insanity. There was hardly a form of nervous or hysterical affection for which marriage should be recommended as a cure, and such advice should hardly ever be given. The exception might apply to those cases in which it appeared from evidence (perhaps derived from the mother) that the nervous symptoms were due to unsatisfied sexual desire. In most cases of puerperal insanity albuminuria was not present, though after labours in which eclampsia had been present puerperal insanity did follow more frequently. He thought that he had cut short or prevented puerperal insanity by giving the patient sleep; one or two doses of chloral would not do harm, though if the drug were continued, it might be harmful. He had found in these cases that one drug could be given with greater impunity than any other, and that was alcohol, which should be administered in full doses at night. He had rarely sanctioned the induction of labour on account of insanity, but in this matter he had been guided by the teaching of Dr. Savage. The occurrence of amenorrhœa in these cases he looked upon as an advantage, and he did not think that it required treatment.

Dr. ROBERT JONES said that he had been at the Claybury Asylum for two years, and he had had 30 cases of confinement in the asylum. There had been 60 cases of puerperal mania among more than 2400 females, or 1 out of 43. Mania was more common than melancholia, for 31 had suffered from mania, whereas 12 were melancholic. Of cases of insanity of lactation 7 were maniacal and 1 melancholic; therefore the exhaustion of lactation did not have much to do with the production of melancholia. Of cases of insanity of pregnancy 6 were maniacal and 4 melancholic, the cases of mania occurring in younger patients (under twenty-five), while those of melancholia occurred in older patients (over thirty), the strain of parturition thus appearing to affect the minds of those past the earliest age of child-bearing. As the asylum had been only built two years it was early yet to speak of recoveries, but 32 out of 60 had recovered, and, of the remaining 28, 15 were convalescing. With regard to the question of recommending marriage, it should be recollected that the parents, as a rule, only came to the physician after all had been arranged and they were satisfied as to the pecuniary prospects of the husband. If by marriage the girl's position was improved and she would thus be happier if married, it might perhaps be advised. Of the thirty confinements in Claybury Asylum albuminuria occurred only in two, and neither of these patients had convulsions. One patient recently confined had epileptic convulsions of Jacksonian form during labour. She was delivered of a full-term healthy child, and had had no albuminuria and no convulsions since. In a second case, within twenty-four hours of confinement convulsions came on, which were only stopped by chloroform. For hypnotics he relied still on chloral and bromide of potassium; he had tried paraldehyde, sulphonal, and other drugs, but with no satisfaction. In the insanity of puberty the patients were discharged from the asylum when the menses reappeared, and that was usually in from six to eight months. In his experience it was exceptional for the maniacal cases to have a high temperature. Among his series only two cases were those of illegitimacy. He mentioned the case of a woman who was confined of her first child in an asylum; she afterwards had seven children without recurrence of insanity, but five out of her seven children had since been in asylums, one of them eight times.

Dr. ANDRIEZEN said he hoped to be pardoned for approaching the paper in a sceptical spirit. One great feature of these cases was their eminent curability. The best classification was probably according to their etiological and pathological factors. Where the individual was saturated with bad hereditary qualities she might easily acquire insanity. After labour the body of the female had been subject to severe strain and drain, and this told on the nutrition of the mother. In cases of hereditary tendency, indeed, the mere psychical idea of conception might be sufficient to cause insanity. He had made notes of the psychical conditions present in 120 cases of labour he had attended as a student; he found that four or five of these presented well-marked mental symptoms. One patient towards the end of the second stage of labour got incoherent, and then had visual hallucinations, which continued for one hour, until the child was expelled, when she quieted down. In another case, when the pains were greatest the patient became delirious and incoherent. The question of insomnia was a very important one, and if the patients were injudiciously nursed would lead to insanity. There was no doubt that parturient women should have plenty of sleep and nutriment. As to drugs, he had found that sulphonal in doses of twenty-five grains or more, combined with two drachms of the syrup of the hypophosphites, produced great good. Where the insanity was of the delirious type, with fever, the resultant brain change was the same as was found after chronic alcoholism, septicæmia, or general paralysis. The brain presented intense congestion, with small punctiform hæmorrhages in the pia-arachnoid and a waxy and greasy condition of the brain substance, the latter breaking with a brittle fracture. Microscopically there was found great destruction of the nerve cells, with free granular, fatty matter. He thought that the puerperal insanities were not special, but must be classed among the ordinary insanities in an etiological scale.

Dr. LEITH NAPIER said that he found it almost impossible to imagine an insanity of conception; so also it was difficult to believe in a special insanity of the earlier or of the later months of pregnancy. He had met with two or three cases of insanity during pregnancy. He thought it must be very exceptional to meet with signs of insanity in ordinary labour cases in the proportion of 1 in 60. He was surprised to hear that chloroform might conduce to insanity after labour. He quoted a case in which a patient who had taken chloroform during labour complained during the early period of her convalescence that she had been poisoned by that drug. He thought that the special form of puerperal insanity was the toxic form. He referred to a case in which insanity developed after labour, and in which, after examination, it was concluded that a pre-existent pelvic inflammation had led to puerperal sepsis. The patient died in a condition of mania, and perhaps some operative interference might have saved her life. In another case a woman was slightly febrile for twenty-one days after delivery, and on examination evidences of pelvic cellulitis were found; a fortnight later she developed insanity. The acute septic cases developed a maniacal tendency, while the cases of chronic sepsis were melancholic in type.

Dr. BOWER thought that in discussing causation sufficient stress was not usually laid upon heredity. He felt quite sure that recovery took place usually in less than four or five months, for the figures given had been taken from the severer cases in asylums. First attacks should be kept out of asylums if possible, and change of scene was of great importance when the patient was recovering.

Dr. SAVAGE, in reply, said that in many cases liable to insanity the "precipitant," so to speak, was the puerperal state. There was a period in the puerperal state during which insanity was common; the type of the insanity was peculiar, and he was sure that there were other cases besides the septic ones. If there was anything that was characteristic in the onset of these cases it was the sleeplessness, which was persistent and was an active, miserable sleeplessness. With regard to hypnotics he had been called to see people who had been drugged almost to death with chloral, and it was this deluging with drugs which was worse than the screaming or other symptoms for which they were given.

CLINICAL SOCIETY OF LONDON.

Intermittent Hydronephrosis and Transient Albuminuria with Movable Kidney.—Spontaneous Thrombosis of the Cerebral Veins and Sinuses in Chlorosis.—Addison's Disease treated with Supra-renal Extract.

AN ordinary meeting of the Clinical Society was held on Jan. 10th. Dr. BUZZARD, President, being in the chair.

Dr. DAVID NEWMAN (Glasgow) read a paper on Intermittent Hydronephrosis and Transient Albuminuria in cases of Movable Kidney. He described four cases, in two of which he performed nephrorrhaphy for the cure of transitory hydronephrosis, and other two cases in which the same operation was resorted to for the relief of torsion of the renal blood-vessels, causing albuminuria and the presence of tube casts in the urine. Case 1: Transitory hydronephrosis and slight albuminuria during paroxysmal attacks of pain. When first seen the patient had developed all the characteristic symptoms and physical signs of movable kidney, with paroxysmal attacks, at first occasional, afterwards frequent and sudden. Such paroxysms sometimes lasted as long as twenty-eight hours, during which time as much as thirty-six ounces of urine accumulated in the renal pelvis; when it escaped the pain passed away slowly. Case 2: Right movable kidney, with transitory hydronephrosis from kinking of the ureter, but no albuminuria. Operation was followed by cure. The hydronephrosis was seldom absent for more than a few days and was sometimes distended to contain forty ounces of urine. Case 3: Right movable kidney, causing torsion of the ureter and leading to hydronephrosis, albuminuria, and the presence of tube casts in the urine. With the onset of the paroxysms of pain hydronephrosis was sometimes present; sometimes it was absent or not observable, but was attended by high specific gravity of the urine and albuminuria, and tube casts always appeared in the urine at the same time as the pain. Since the operation no albumin or tube casts had been found. Case 4: Left movable kidney, causing torsion of renal bloodvessels, albuminuria, tube casts, severe pain, and suppression of urine. There was no hydronephrosis, and operation was succeeded by recovery. The kidney was only freely movable, but no increase in size could at any time be made out.—Mr. BRUCE CLARKE said that two points of considerable interest had been raised by the paper: one was the frequent presence in the urine of albumin and tube casts, and the other was the method of suture. He himself thought that usually a certain amount of albumin was found in the urine in cases of hydronephrosis; it was transient, but was fairly constant. In nephrorrhaphy he had never packed the wound with gauze; nevertheless, in those cases in which nephrectomy was afterwards required he had found great difficulty in removing the kidney, so firmly was it fixed. In performing nephrorrhaphy he cut through the capsule, excoriated the renal substance by several scratches with the knife, and then fixed the organ by two or three sutures passed through the kidney substance. He congratulated Dr. David Newman on the good results he had obtained in the presence of so great a degree of antecedent hydronephrosis. He himself had not succeeded so well in cases of large hydronephrosis, but he had not fixed the kidney so high up.—Dr. DAVID NEWMAN, in reply, said his paper dealt rather with cases of occasional hydronephrosis than with cases where hydronephrosis was constantly present, but only occasionally relieved. In the latter the kidney was diseased and albumin frequently present. But in the cases of occasional hydronephrosis the presence of albumin and tube casts was more difficult to explain. Why did the transient passive hyperæmia lead to the presence of tube casts, the occurrence of which physicians were in the habit of regarding as of grave import and an indication of inflammatory trouble? The points in the operation were to fix the kidney as high up as possible, and to fix it well. In doing this his habit was to cut away as much of the adipose capsule as possible.

Dr. LEE DICKINSON read a communication on Cases of Spontaneous Thrombosis of the Cerebral Veins and Sinuses in Chlorosis. Three fatal cases in chlorotic young women were described, and others were referred to. Thrombosis of this kind, as an event of clinical importance, occurred more often in chlorosis than in any other one disease. That chlorotic blood was morbidly prone to coagulate within the vessels was evident from the frequency with which it did so in the veins of the lower extremities. In one of the cases described a pneumonic state of part of one lung was found post mortem, a thing worth remarking, because in pneumonia the blood was highly fibrinous and coagulation in the right heart a recognised danger. Sinus thrombosis, however, was very rare in pneumonia, and of 367 cases of pneumonia observed by himself other forms of venous thrombosis occurred in only seven. Of these seven, four were those of young women, and two were chlorotic. The distribution of intra-vascular coagulation brought about in animals by injection of foreign substances into the circulation was largely determined by the amount of carbonic acid in the blood. Chlorotic blood was probably overloaded with carbonic acid. The comparative infrequency of thrombosis in the sinuses, where the mechanical conditions were so favourable, might be explained by the recent observation that the cerebral venous blood was but slightly carbonised. The lesser degrees of sinus thrombosis were not always fatal, and were, perhaps, less rare than was supposed. In some recorded cases of optic neuritis as a complication of non-fatal chlorosis the severity of the headache was out of all proportion to the degree of anæmia. Optic neuritis and severe headache were the two most prominent symptoms of sinus thrombosis. A fourth fatal case was described in a young, but not chlorotic woman. The thrombosis was limited to the venæ Galeni and their tributaries.—Sir DYCE DUCKWORTH said that many years ago he saw with Dr. J. Andrew a young woman with well-marked chlorosis. There was intense headache, and the case proved fatal. Post mortem there was found an exquisite example of thrombosis of the cerebral sinuses. The next case he saw with Dr. Matthews Duncan. A woman aged thirty-five had been ill for three weeks after her confinement and had a "white leg." There were severe and torturing headache, optic neuritis, and slight convulsive attacks. Thrombosis of the cerebral sinuses was diagnosed, and a fatal result ensued. At the necropsy numerous thrombi were found in the cerebral veins and sinuses. Prominent symptoms in this condition were the severe headache, profound anæmia, optic neuritis, and convulsive movements. The treatment should be vigorous and adopted immediately upon recognition of the disease. He recommended the free use of alcohol and ammonia to stimulate the circulation, the food should be such as not to give rise to too great hyperinosis of the blood, and iron with alkali was valuable.—Mr. SPURRELL related a case which was admitted to the East London Hospital at Homerton a year ago. The patient was a girl aged thirteen, who was supposed to be suffering from scarlet fever, but it was found on her admission that this was not the case. There were extreme headache, a temperature of 104° to 105° F., and rigidity of the neck, with some retraction. She lay in a state of coma; the pupils were equal and dilated, but did not act to light; there was little, if any, optic neuritis. After a week she died, and post-mortem the cerebro-spinal fluid was found to be greatly in excess. The right optic thalamus was seen to be enlarged; on section it was in a condition of red softening in its whole extent; a thick film of fibrinous lymph lay on the choroid plexus over it, the right vein of Galen was thrombosed, and an ante-mortem clot was found in the great vein of Galen, which projected a short distance into the straight sinus. The patient was anæmic, but not much so, and there was no heart disease.—The PRESIDENT said that there was at present under his care in the Hospital for the Paralysed and Epileptic a young woman aged eighteen, who had been admitted a month previously, and was, he thought, subject to the affection under discussion, though she was recovering. There had been pain on both sides of the face for twelve months. Two months ago she had a series of screaming fits, followed by loss of consciousness for several hours. There was intense headache three weeks before her admission, and the right lower extremity swelled up from the groin to the foot. When admitted she was extremely chlorotic, and was so weak that she could scarcely stand. Though she tottered, yet there was no definite paralysis; there was double optic neuritis, and the intense headache continued. The hæmoglobin was estimated and found only to reach 50 per cent. Under administration of iron she at once improved, and the optic neuritis subsided. At present the hæmoglobin was 80 per cent., and the red blood corpuscles 95 per cent. Probably many moderate examples of this disease were in existence and were mistaken for hysteria.—Dr. LEE DICKINSON briefly replied. He said that the late Dr. Bristowe, in his work on "The Nervous System," had related a case very similar to that detailed by the President. The patient was extremely hysterical, but the case was diagnosed as one of thrombosis of the sinuses in a chlorotic patient.

Dr. SYDNEY RINGER and Dr. ARTHUR PHEAR contributed an account of a case of Addison's Disease treated with Supra-renal Extract, and also gave a brief *résumé* of recorded cases for which similar treatment had been adopted. It appeared that of nine cases five had shown

improvement, although in some of these a sufficient time had not elapsed to determine whether or not the benefit was permanent. In two cases no improvement was noted; in one case the treatment was given only a very limited trial; and in one the disease ended fatally in spite of supra-renal treatment. The supra-renal tissue was in some cases administered by the mouth, in other cases hypodermically. Details were then given of a case lately under this treatment in University College Hospital. A woman aged twenty-eight had been suffering from symptoms of Addison's disease for a period of two years, attended with progressive weakness, some loss of flesh, vomiting without special relation to food, and pigmentation of the skin. Excessive pigment was present on the face, hands, forearms, axillæ, about the nipple, over the knee-cap, and in the neighbourhood of the toes and ankles. The discolouration was well marked in the armpits and around the mouth. There were deeply pigmented inky patches on the mucous membrane of the mouth, opposite the teeth. There was no evidence of tubercle in the lungs or elsewhere. Treatment with supra-renal extract was commenced, in doses equivalent to 45 grains of supra-renal body daily; this was gradually increased to a daily dose of 120 grains. There rapidly followed improvement in the general condition, and the pigmentation became notably lessened in degree. Vomiting, however, remained troublesome. No rise of arterial tension was noted. The improvement continued for four weeks, when there was a rapid change for the worse. There was no increase of pigmentation, but the general condition quickly deteriorated, cardiac action became feeble, and death occurred within six weeks of the commencement of the treatment and just over two years from the earliest symptoms of the disease. The temperature rose to 102° F. on the day before death. During the last few days arsenic and strychnine were given in the place of the supra-renal extract. The necropsy showed the supra-renal bodies to be shrunken and flattened about a third of their normal size, and exhibiting no trace of the normal structure.—Dr. PARKINSON related a case of Addison's disease treated by supra-renal gland which had been under the care of Dr. Murrell at the Westminster Hospital. The patient was a man aged thirty-one, who had a history of three months' weakness and bronzing of the skin. He was admitted in November last, and there was no evidence of lung disease. Five-grain tabloids of the gland were at first given, but this appeared to cause vomiting, and so after twelve days fresh sheep's gland was minced and given on bread with pepper and salt, one drachm being given three times daily. Three days later, the vomiting having increased, the dose was reduced to fifteen grains three times daily; but, although the vomiting had diminished, the patient gradually sank and died in the beginning of the present month. Caseation of the adrenals was found post mortem.—Dr. TURNEY referred briefly to two cases in which supra-renal extract had been given. The first was that of a man aged thirty, and attention was drawn to his complaint by the occurrence of sudden syncope; the diagnosis was confirmed by the discovery of slight increase of pigmentation, most marked on the backs of the hands, and of moles of recent appearance. The vomiting was slight. Glycerine extract of supra-renal capsule was given in the dose of one-third of a gland per diem. There was no definite result except an increase of the vomiting. The necropsy confirmed the diagnosis, both adrenals being caseous. The second case was not fairly quoted in connexion with supra-renal gland treatment, for the patient was admitted in the last stage of the disease, with marked asthenia, and died after only four doses had been administered.—Dr. HALE WHITE referred to a case, at first supposed to be Addison's disease, in which supra-renal extract was given. It was administered by the mouth, but the temperature rose after each dose to 102° F. The patient afterwards passed dark urine, which was recognised as that of pernicious anæmia, and this latter diagnosis was confirmed at the necropsy.—Dr. RINGER, in reply, remarked that he drew no conclusions from his single case, for "one swallow did not make a summer." Addison's disease ran a varying course, and cases often improved without treatment; hence they should be careful in drawing conclusions as to the effects of drugs.—Dr. PHEAR, in reply, said he did not think that the vomiting was due to the adrenal extract, for it was equally marked before the treatment was commenced. The patient's temperature was normal throughout, except just before death.

HUNTERIAN SOCIETY.

Chronic Pharyngeal Affections and their Relation to Diphtheria.—Localised Rheumatoid Arthritis.

AN ordinary meeting of this society was held on Jan. 8th, Mr. C. J. SYMONDS, President, being in the chair.

Mr. J. T. Roberts, Mr. E. B. Landon, Dr. H. E. Blandford, Mr. R. Jones, Dr. J. McClymont, Mr. E. L. Downes, Dr. H. Horrocks, Dr. A. Mitchell, and Dr. H. J. Campbell were admitted ordinary Fellows of the society.—Mr. COTMAN thought the society should be congratulated on the unprecedentedly large number of admissions to its ranks, showing the very flourishing condition in which it found itself.

Dr. J. H. SEQUEIRA then read a paper entitled "Chronic Pharyngeal Affections and their Relation to Diphtheria"; admitting diphtheria to be a specific bacillary disease, he wished to consider the entrance of the bacillus by the air-passages. He referred to the fact established by Dr. St. Clair Thomson and Dr. Hewlett that air filtered through the nares was practically germ-free, and hence deduced as a corollary that anything which contributed to oral breathing must be a predisposing factor in the onset of diphtheria. He then drew attention to the depth of the crypts of the tonsils, where bacilli could rest undisturbed, and to the altered vitality of the tonsillar mucous membrane in catarrh. From these two premisses he proceeded to draw conclusions, and summed them up as follows: (1) Tonsillar hypertrophy and post-nasal adenoids are found chiefly in children from the age of two to puberty, and 80 per cent. of the cases of diphtheria are found between those ages; (2) these pharyngeal affections are rare after thirty, while only 3 per cent. of diphtheria cases occur at this period of life; (3) 72·5 per cent. out of forty cases of diphtheria that he had examined presented evidence of tonsillar hypertrophy; and (4) diphtheria is a common sequela of scarlet fever, which severely affects the tonsils and often leads to mouth breathing.—Dr. F. J. SMITH said he thought that adenoids and enlarged tonsils with catarrhal conditions did not account for the whole increase in vulnerability to diphtheria; something more must be added in the shape of general constitutional weakness of resistance to infection.—Dr. HINGSTON FOX laid stress upon family disposition to the incidence of specific diseases and said he knew of many cases in which immunity seemed to run in families.—Dr. A. DAVIES referred to his experience of the frequency of diphtheria as a sequel of scarlet fever.—Mr. P. WARNER quoted a case of simple tonsillitis (occurring in the nurse of a diphtheria patient) in which no diphtheria bacilli were found.—Dr. GOODALL was not at all convinced that throat diseases predisposed to diphtheria. He referred to the difficulty of obtaining reliable histories of the previous condition of the throats of the patients in the fever hospitals, and suspected that it might prove that diphtheria was the cause and not the consequence of chronic throat trouble. He recognised diphtheria as a sequel of scarlet fever, but said it occurred very irregularly, now attacking very few and then a large proportion of convalescent scarlet fever patients.—The PRESIDENT mentioned two cases of removal of adenoids in which the patients had unfortunately succumbed to diphtheria after operation for removal of the growths.—Dr. SEQUEIRA briefly replied.

Dr. FORTESCUE FOX then read a paper entitled "Localised Rheumatoid Arthritis." Simple local arthritis, he considered, was distinguished from all other forms of degenerative joint lesion, specific, septic, or nervous. Whilst the latter were parts of generalised disease, simple arthritis was a local disease, excited by injury, in those in whom, from hereditary causes or senility, the joints were vulnerable. Hence it affected by preference exposed joints and the right side of the body. A summary was given of thirty-nine cases of local arthritis met with at Strathpeffer Spa and affecting the shoulder, knee, or hand. In the hand the basal joint of the thumb was most commonly involved ("typical senile local arthritis"), causing a cupping of the palm. "Last joint arthritis" was regarded as a form of gout in women. "Residual arthritis," the result of bygone acute rheumatism, &c., was also distinguished from proper local arthritis. The latter belonged to the climacteric and the senile periods. The treatment consisted in active irritation in the early stages, rest, and later some form of thermal treatment. The methods in use at Strathpeffer were described. The prognosis in most cases was not unfavourable.

BRITISH GYNÆCOLOGICAL SOCIETY.

Annual Meeting.—Exhibition of Specimens.

THE annual meeting of this society was held on Jan. 9th, 1896, Dr. CLEMENT GODSON, President, being in the chair.

The treasurer, Dr. J. A. MANSELL MOULLIN, read his annual report. A hearty vote of thanks was accorded to him on the motion of the PRESIDENT, seconded by Dr. TRAVERS.—The editor of the journal, Dr. LEITH NAPIER, then read his annual report.—The PRESIDENT moved that a cordial vote of thanks be given to Dr. NAPIER. This was seconded by Dr. BENNETT and carried unanimously. A vote of thanks was given to the retiring officers on the motion of Mr. BOWREMAN JESSETT, seconded by Dr. HEYWOOD SMITH. The ballot for the election of officers resulted in the return of the gentlemen nominated by the council.

The PRESIDENT then read his annual address, after which Dr. A. ROUTH proposed a hearty vote of thanks to him for his interesting discourse. He congratulated Dr. Godson on his being the first gentleman to hold the office of President for two successive years.—Mr. MACAN seconded the resolution, which was carried with acclamation.

Mr. MAYO ROBSON showed the following specimens: 1. Myoma removed by Hysterectomy: New Treatment of Divided Ureter. The patient was aged fifty years. The tumour after removal weighed 20 lb. When slitting the peritoneum over the tumour it was found that the left ureter passed in front, and that 2 in. of it had been removed. He made a vertical slit in the upper end of the lower piece, so as to enlarge it funnel-wise, and then fixed the lower end of the upper-piece into it, securing it with a few fine sutures. The patient made a good recovery. There was no hæmaturia, nor were there any other urinary symptoms. 2. Ectopic Gestation in the Left Fallopian Tube. Primary rupture occurred in the sixth week, with formation of hæmatocele. The patient was operated on in the twelfth week and made a satisfactory recovery. 3. Sarcomatous Alteration in Myoma; Hysterectomy; Intraperitoneal Treatment of Pedicle by a Method not previously described. The tumour increased rapidly at the age of fifty-one years. Hysterectomy was performed by amputation above the cervix, with anterior and posterior flaps. There was a little oozing from one of the flaps, so he brought the stump of the uterus forward and fastened the peritoneum round it, while he sutured the fascia and skin over it. The patient made a rapid recovery. 4. Fibro-cystic Tumour removed from between the Layers of the Sigmoid Meso-colon. The patient was aged forty-three years. The tumour had grown quickly. The uterus and ovaries were free. The tumour was shelled out fairly easily from between the layers of the meso-colon. Recovery took place without bad symptoms. 5. Myoma of the Uterus, blocking up the Pelvis, in the eighth month of Pregnancy; Enucleation per Vaginam; Normal Delivery at Term. This was an interstitial myoma involving the posterior part of the cervix; in a similar case he had once done a Porro's operation. In this case he incised the capsule from the vagina and shelled out the tumour. The patient did not miscarry, but went on to term. 6. Multiple Fibro-myomata of the Uterus, removed per Vaginam. The patient was much blanched by hæmorrhage. The tumour filled the vagina and extended to the umbilicus. It was enucleated through the vagina, after incising the posterior lip of the cervix. When the patient went home at the end of a month no remnant of the tumour could be felt.—The PRESIDENT conveyed the thanks of the Society to Mr. Mayo Robson for his interesting specimens, and complimented him on his brilliant results.—Mr. BOWREMAN JESSETT complimented Mr. Mayo Robson on his novel, simple, and ingenious treatment of divided ureter. He would certainly adopt this method if the necessity arose. He thought pan-hysterectomy was an even more satisfactory way of dealing with fibroids than the plan adopted in the case of the third specimen, and that both methods were superior to treatment by the *serre-nœud*. He hoped to see this instrument relegated to the museums. He shared Mr. Mayo Robson's opinion that fibroids not uncommonly developed malignant character after the menopause.—Dr. LEITH NAPIER had seen, in the last four or five years, about fourteen cases where fibroids developed a rapid growth after the menopause. He believed that this and the malignant changes occurred principally in those fibroids which had their origin in soft glandular structures, and that hard fibroids generally atrophied.—Dr. HEYWOOD SMITH and Dr. PURCELL made some remarks, and Mr. MAYO ROBSON briefly replied.

Mr. F. EDGE (Wolverhampton) showed a specimen from a case of Para-uterine and Para-vaginal Tumour extending into the Left Buttock.

A resolution passed by the society with regard to the admission of homœopaths is referred to in our "Annotation" columns.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.

The Diagnosis of Gonorrhœal Inflammation.—The Treatment of Enterocolitis in Infants and Young Children.

A MEETING of this society was held on Jan. 3rd, Dr. A. SYMONS ECCLES, President, being in the chair.

Dr. MCCANN read a paper on the Diagnosis of Gonorrhœal Inflammation, in which the method of obtaining pus was explained, and fuchsin was recommended as the best staining agent for the gonococcus, with eosin and methylene blue for contrast stains. The relation of the gonococcus to the pus and epithelial cells was demonstrated by photo-micrographs. A gradual process of pus cell destruction had been traced, which was partly antagonistic to the theory of Metchnikoff, and the same destructive process was seen in the epithelial cells. A large number of gonococci are never seen in conjunction with a large number of pus organisms. They are present in the pus of every untreated case at some period. Secretion free from them does not cause a gonorrhœal inflammation, but secretion containing them even in small quantities infects sensitive mucosæ with absolute certainty. The concluding remarks were devoted to the cultivation test.—The PRESIDENT said that in his experience there was not much hope of dealing successfully with gonorrhœal arthritis so long as gonococci were still to be found in the urethral discharge.—Mr. MCADAM ECCLES remarked that microscopic examination alone was often insufficient for diagnosis, while cultivation was extremely difficult.—Mr. R. W. LLOYD quoted a case of gonorrhœal arthritis in which there was a cardiac bruit, and coincident with a notable change in its character acute pyæmia was developed and rapidly proved fatal.—Dr. MCCANN, in reply, said that since good observers, such as Neisser, had found gonococci in the pus from arthritic joints he was forced to admit that a certain proportion of these cases were caused by the gonococcus.

Dr. A. W. CLEMOW read a paper on the Treatment of Enterocolitis in Infants and Young Children. The undoubtedly bacterial origin of the disease suggested rational methods of treatment, which were (1) to evacuate the intestines of their fermenting contents; (2) to combat the processes of decomposition by suitable drugs; (3) to give only such food as shall maintain strength and at the same time minimise the introduction of fresh organisms; and (4) to treat symptoms and complications as they arise. Of antiseptic drugs he preferred subnitrate of bismuth and calomel, and he deprecated the routine use of opiates and astringents. He had been much impressed with the value of intestinal irrigation, which exercises no influence upon the course of tuberculous ulceration of the intestine or ordinary cases of dyspeptic diarrhœa of infants, but may be expected to benefit true cases of enterocolitis, especially those in which the colon is largely involved. It requires to be carried out with great caution, especially when there is marked prostration, and the irrigator must not be held too high.—Dr. COLMAN referred to the possibility of accidents in irrigation. From post-mortem experiments it is deduced that two feet was sufficiently high for the can to be held in cases where the colon was softened.—Mr. MCADAM ECCLES cited two cases of perforation following irrigation employed for the reduction of invagination of the bowel.—The PRESIDENT held that in the treatment of these cases milk in any form should be discarded from the dietary for twenty-four hours, veal broth taking its place.

SOUTH-WEST LONDON MEDICAL SOCIETY.

Professional Unionism.

A MEETING of this society was held on Jan. 8th, Dr. GILBERT RICHARDSON being in the chair.

An address on Professional Unionism was delivered by

Mr. W. G. DICKINSON, which is published on p. 149 of our present issue.

Mr. T. A. I. HOWELL referred to the difficulties which surround the whole question and pointed out that local medical societies fail to attract men who are bringing discredit on the profession.

Dr. MORGAN DOCKRELL alluded to cheap practice and underselling, and stated the root of the evil to be that the supply of medical men is greater than the demand. He thought that means should be taken to check the influx of medical students and to educate them in medical ethics; he further alluded to the necessity for reforming the British Medical Association.

Dr. ROE and Dr. BARKWELL referred to the touting of insurance companies and dispensary agents.

Mr. A. E. DODSON mentioned the evils of the out-patient system and of the lay medical aid societies, at the same time expressing sympathy with the difficulties of those commencing practice.

Mr. DICKINSON having briefly replied, the meeting terminated with a hearty vote of thanks to Mr. Benjamin Duke for the use of his house.

CARDIFF MEDICAL SOCIETY.

Exhibition of Specimens.

AT an ordinary meeting held on Jan. 3rd, Alderman Dr. EDGAR JONES, in the chair, Mr. J. LYNN THOMAS showed (1) A Hard Fibroma of the Ovary weighing 5 lb., which he had removed six months ago from a patient aged forty-one years. The fibroma had grown in conjunction with a papillomatous cyst which had been tapped five times. Fibroma of the ovary, he said, was extremely rare, and reference was made to cases recorded by Sir John Williams and Mr. Alban Doran. The skin of the abdomen at the operation was coarsely tuberculated, and the subcutaneous tissue was similar to that of elephantiasis; this condition was probably due to interference with the lymphatic circulation, as the tumour was firmly adherent to the entire anterior abdominal wall. Five months later the skin of the abdomen was quite smooth. (2) Chondro-sarcoma of the Testis from a patient aged twenty-seven years. The growth was painless until the patient had a blow, when it suddenly grew and became stationary again; its duration was three months.—Dr. J. H. REES, of Penarth, and Mr. THOMAS advised exploration to clear up the diagnosis between tumour and hæmatocele.—Mr. HERBERT COOK remarked on the extreme malignancy of sarcomata of the testis and mentioned the case of a medical friend who died eighteen months after early removal of the tumour.

The adjourned discussion upon Dr. Stewart's paper was opened by the PRESIDENT, and Dr. PATERSON, Mr. COOK, and Mr. THOMAS spoke, Dr. STEWART replying. It was hoped that the paper would be published *in extenso*, as it clearly showed the effect of civilisation, race progress and decay, upon general paralysis.

DEVONSHIRE HOSPITAL AND BUXTON BATH CHARITY.—The Devonshire Hospital at Buxton was established in September, 1858, under the patronage of the Duke of Devonshire, and, in conjunction with the ancient Buxton Bath Charity, has now developed into a hospital which contains 300 beds and encloses a central covered area half an acre in extent. The report for 1895, which was submitted at the annual meeting of the committee of management held on Jan. 4th, showed that 2562 in-patients had been received during the year, or 94 fewer than during the year 1894. The number of patients received under the powers of the Cotton Districts Fund was 343. The in-patients included 2126 cases of rheumatism or rheumatoid arthritis, 680 of which were complicated with some form of heart disease. There were also 86 cases of gout, 90 of sciatica, and 20 of surgical injuries, including 7 cases of fracture of the lower limb and 2 other cases in which amputation of the foot was performed. Of these 2562 patients, 2399 were discharged improved and 5 died. The usefulness of the Buxton mineral water in the treatment of rheumatic conditions, general and local, continues to be shown by clinical experience; the baths were used by eight out of every nine patients. The average cost per week of each patient during the year was 13*s.* 6*d.*; the total receipts have exceeded the total expenditure by £567.

Reviews and Notices of Books.

Diseases of the Chest, Throat, and Nasal Cavities, &c. Third Edition. By E. FLETCHER INGALS, A.M., M.D., Professor of Laryngology and Practice of Medicine, Rush Medical College, &c. London: Henry Kimpton and Hirschfeld Bros.

THIS is a book of 686 pages, including the index. Of these, 268 are occupied with the discussion of diseases of the lungs, heart, and circulatory apparatus, and the remaining 418 with a consideration of the nature and treatment of diseases of the throat. There are 240 illustrations in the work, of which all, except forty-nine, are intended to elucidate the text concerned with throat and nose diseases. There are also three prefaces, of which only one, the second, is dated, and the work itself carries no date on the title-page. The tone of the prefatory remarks differs. The first purports to give a "complete exposition of the subject of physical diagnosis so far as it relates to diseases of the chest, throat, and nasal passages." In the second the author states that he has carefully consulted the extensive literature of these topics, but has made no attempt to collate the various theories and methods suggested by different authors. He has limited the argument to that which personal knowledge of the diseases and *of writers* (the italics are ours) commends to his own judgment. In the third preface we are asked not to regard the book as an encyclopædic work. Of this we do not think there is much danger. If the work be intended to be a protest against too narrow a specialism, we hail with pleasure the object with which it was written. If, on the other hand, it be intended to rank as a special treatise on diseases other than those of the throat and nose, we confess that we think that the work will scarcely fulfil its author's expectation. As a not too exhaustive *réchauffé* for the elementary education of students, the portion dealing with the diseases of the chest contains much useful information concisely stated. There are points we might have criticised at greater length were we dealing with an exhaustive treatise on these subjects, such as the association of "purring tremor or thrill" with valvular regurgitation without mentioning its much more characteristic occurrence with mitral constriction, but such would manifestly be out of place here. The section devoted to diseases of the nose and throat is more complete, but even here we are surprised to find no mention of antitoxin in the treatment of diphtheria, while reference is made, in discussing pneumonia, to experiments with antipneumotoxin! Surely in an up-to-date edition of a work on diseases of the throat it is not too much to expect some reference to the subject, whether the author regards the use of that substance with favour or not. Minor matters of language are questions of literary taste and perhaps do not come within the sphere of legitimate criticism, but, while we know what it is to see a patient retch, we confess we do not quite know what it is for a patient to "gag easily." Possibly the term is derived from the German *gähnen*, to yawn, and means something covered by the previously used word "retch." By "crowding down the forceps" we gather that the author means taking a secure hold of an organ, but, while we have heard of a frigate crowding on all sail, we do not remember to have seen the term applied before to a surgical instrument. Shortly, the book is a good index or compilation of the subjects treated; the author seems to have had considerable practical experience of laryngological work, and those desiring a practical and concise manual to guide them in their daily routine will find nearly all the information they require. The fact that the book has reached its third edition proves that

there are those who appreciate it, but the inspiration which impels an author to restate for the benefit of the profession information which is easily procurable from dozens of previous works is to us a mystery.

A Text-book of the Principles of Physics. By ALFRED DANIELL, M.A., LL.B., B.Sc., F.R.S.E. Third Edition. New York and London: Macmillan and Co. 1895. Price 21*s*.

THE importance of a course of pure physics to the medical student is now recognised. It should, however, be the basis of his studies, and not serve merely as a subject which is to test his power of passing examinations. It will help him to a clear understanding of the vital processes, since they are dependent upon physical phenomena, and thus enable him, when he continues his studies in the alleviation of the ills and pains of the human race, to found his diagnoses and treatment on a really rational basis. How else, without a clear conception of the properties, of the states, and of the constitution of matter, of molecular forces and action, of sound, heat, optics, and electricity, can he be expected to understand the physiology of the human organism, embracing such vital subjects as blood-pressure, the diffusion of gases and liquids through membranes, osmosis, respiration, the visual and aural faculties, the nervous system, the acquirement and expenditure of force within the body, and so on? And what an anomaly it was when only a few years ago a student of medicine could proceed to the degree of M.D. in some of our universities with practically no training in this subject, the principles of which underlie each and all of the phenomena just enumerated. Professor Daniell has had a considerable share in repairing the breach, and the first edition of his well-known work on Physics, published in 1884, came as a proof of his conviction that this branch of knowledge was neglected to a regrettable extent and very much to the detriment of medical progress. As he tells us in the preface, the book was designed primarily as a contribution to medical education; it is now recognised as fulfilling a wider sphere of usefulness, and is justly reckoned amongst the leading text-books on physical science. By an intelligent perusal of the work the medical student is put in possession of the various physical principles the clear comprehension of which will throw light upon, and rescue from chaos, the multitudinous facts which are involved in the great physiological processes. Further, it will serve as an introduction and companion to practical work. Thorough knowledge, as the author puts it, must be drunk in by the eyes and the ears and absorbed by the finger-tips, and the true use of a book of this kind is not to replace practical work, but to economise the labours of the student. The scope of the work precludes any lengthened treatment of matter in detail in the space at our disposal, and we must be content to indicate its plan. The preliminary knowledge of physical principles is not assumed, and the reader is helped by the fact that prominence is given to the type in those paragraphs which serve to link together general principles, and, an insight into them having been gained, he can then proceed to the paragraphs in smaller type which give an application—and are, in fact, an amplification—of these principles. After a generalisation, in the introductory chapter, of the sciences which are comprehended under the title "physical science," the author proceeds in the succeeding chapter to discuss time, space, and mass, and in Chapter II. passes to the notions derived from the preceding. Measurements (length, surface, volume; time, mass, and force), work and energy, kinematics, kinetics, attraction and potential, gravitation and the pendulum, matter, solids, liquids, and gases, follow in due order, till in Chapter XIII. the nature of heat is discussed, then sound, and in natural sequence comes a section on ether waves, Chapter XVI., on electricity and magnetism, concluding the series. As an instance of the conformity of the present edition with recent developments might be mentioned the recent marvellous phenomena connected with alternating currents and the beautiful experiments of Mr. Nikola Tesla. On the other hand, we could find no reference to modern research bearing on the properties of matter at very low temperatures, or on the phosphorescence of bodies submitted to intense cold; and, again, in a description of instruments for measuring high temperatures the potassium and sodium alloy thermometer of recent invention is not included.

Physics is an abstruse subject and an exceedingly comprehensive one, and to deal with it lucidly in the dimensions of a text-book like this without serious omissions is an accomplishment of no mean degree. Professor Daniell is both master and a master exponent of his subject.

Dictionary of National Biography. Edited by SIDNEY LEE. Vol. XLV.: Pereira—Pockrich. London: Smith, Elder, and Co. 1896.

AMONG the many interesting memoirs in this volume the most striking are those of three strenuous upholders of Britain's supremacy during very troublous times. William Pitt, the first Earl of Chatham, was born in London in 1708, his father being a landed proprietor in Cornwall. In 1735 he entered Parliament as representative of Old Sarum near Salisbury, and soon displayed unusual powers of oratory. His first administration lasted, with an interval of eleven weeks, from December, 1756, to October, 1761, during which time he had the entire direction of foreign affairs and of the war against France and her allies, which was waged in Europe, America, and India. He again formed a Ministry in July, 1766, and in the following month was created Earl of Chatham; but his health was quite shattered, and he resigned office in October, 1768. In April, 1778, he was seized with a fit in the House of Lords whilst speaking on behalf of the disaffected American colonists, and he died in the ensuing month. His eldest son, and successor in the title, followed a military career and was remarkable chiefly for his complete failure as commander of the Walcheren expedition. His second son, William Pitt, born in 1759, became Prime Minister in 1783, before he was twenty-five years of age, and remained in office until March, 1801. He again formed a Ministry in May, 1804, and continued at the head of the Government until his death in January, 1806, his last illness being apparently induced by the news of the battle of Austerlitz. Sir Thomas Picton was born in Pembrokeshire in 1758 and entered the army in 1771. He was military governor of Trinidad from February, 1797, to June, 1803, and was subsequently for some weeks commandant of Tobago. Then, just as in recent years, the judicial authorities of those islands committed irregularities, and Picton was involved in litigation in the English courts. In 1810 he received an important command as Major-General under Wellington in Portugal, served throughout the campaign, and, in the words of his biographer, "proved himself Wellington's right hand in the Peninsula." At Waterloo, on June 16th, he was struck by a ball which fractured some of his ribs, but he concealed the wound from everyone except his servant. On June 18th, whilst heading a charge of his men, a ball struck him on the temple and he fell dead.

Twenty members of the medical profession appear among the subjects of biography. Henry Plumptre was born in Nottingham, studied medicine at Cambridge, and graduated as M.D. in 1706. He was admitted a Fellow of the College of Physicians of London in 1708, delivered the Gulstonian and Lumleian Lectures and the Hunterian Oration, was censor, registrar, and treasurer of the College, and served as President for six years from 1740 to 1745. He was also physician to

St. Thomas's Hospital, and he died in 1746. His son, Russell Plumptre, born in 1709, studied medicine at Cambridge, graduated as M.D. in 1738, and in 1741 was appointed Regius Professor of Physic at Cambridge; he died in 1793. William Pitcairn was born in Fifeshire in 1711, studied medicine at the University of Leyden, and graduated as M.D. at Rheims. The University of Oxford gave him the degree of M.D. in 1749, and he proceeded to London, where he eventually obtained a very large practice. He became a Fellow of the College of Physicians of London in 1750 and was Gulstonian lecturer and several times censor. He was elected President in 1775 and every following year, till he resigned in 1785. He was appointed physician to St. Bartholomew's Hospital in 1750, and in 1784 was elected treasurer, after which he lived in the treasurer's house in the hospital, but had also a country residence, with a botanical garden of five acres, in the now densely populated locality of Upper-street, Islington; a ward in St. Bartholomew's Hospital still bears his name. Dr. Pitcairn died at Islington in 1791 and was buried in the church of St. Bartholomew-the-Less, within the hospital walls. Robert Pitt was born in Dorsetshire in 1653, studied medicine at Oxford, graduated as M.D. in 1682, and was elected Fellow of the Royal Society in the same year. In 1687 he was admitted as a Fellow of the College of Physicians of London and was censor in 1687 and 1702. He was physician to St. Bartholomew's Hospital from 1697 to 1707 and took an active part in the controversy which followed the establishment of a dispensary by the College of Physicians in 1696. He published several works, two of which demonstrated the uselessness of various medicaments which were at that time much in favour. He died in 1712. Charles Peters was born in London in 1695, studied medicine at Oxford, was elected Radcliffe Travelling Fellow in 1725, and graduated as M.D. in 1732. He published in 1720 an edition of Fracastoro's Latin poem on Syphilis. He was elected a Fellow of the College of Physicians of London in 1739 and was censor in 1744. He was also physician extraordinary to the King, physician-general to the army, and physician to St. George's Hospital. David Pitcairn was born in Fifeshire in 1749, being a nephew of Dr. William Pitcairn, already mentioned. He studied at the Universities of Edinburgh, Glasgow, and Cambridge, graduating at the latter as M.D. in 1784. He was elected a Fellow of the College of Physicians of London in 1785, and was censor, Gulstonian lecturer, and Harveian orator. He was physician to St. Bartholomew's Hospital from 1780 to 1793, and was the first to discover that valvular disease of the heart was a frequent result of rheumatic fever. He enjoyed a large private practice and died in 1809. Jonathan Pereira was born in London in 1804, studied medicine at the Aldersgate-street School, became a Licentiate of the Society of Apothecaries in 1823, and was at once appointed apothecary to the dispensary of St. Bartholomew's Hospital. In 1840 he obtained the diploma of M.D. from Erlangen and was appointed assistant physician to the London Hospital. In 1845 he became a Fellow of the Royal College of Physicians of London. Dr. Pereira was an eminent pharmacologist and lecturer on materia medica and chemistry. Of his numerous works the principal one was "The Elements of Materia Medica." He died in 1853. William Pirrie was born in Aberdeenshire in 1807 and studied medicine in the Universities of Aberdeen and Edinburgh, graduating at the latter as M.D. in 1829. "Returning to Aberdeen in 1830, he was appointed lecturer on anatomy and physiology in the joint medical schools of King's and Marischal Colleges. On the separation of the schools in 1839 he became the first Regius Professor of Surgery in Marischal College, and when they were again united in 1860 he continued to teach as Professor of Surgery in the University of Aberdeen. He resigned his chair in the summer of 1882 and died on Nov. 21st in the same year." He was the author of a treatise on the "Principles and Practice of Surgery," which passed through several editions.

LIBRARY TABLE.

Rural Water-supply: a Practical Handbook on the Supply of Water and Construction of Waterworks for Small Districts. By ALLAN GREENWELL, A.M.I.C.E., and W. T. CURRY, A.M.I.C.E., F.G.S. London: Crosby, Lockwood, and Son. 1896.—This manual had its origin in a series of articles which appeared in the *Builder* between July and December, 1894. We may take it, therefore, that the subject-matter, having already been published, has been exposed to criticism, and that the authors have taken advantage of this fact, as well as of the advances since made, when revising the work prior to its publication as a whole. It deals chiefly, though not exclusively, with the engineering side of the question, of which it gives a clear and intelligible account. We should like to have found included in it a chapter on where to search for water, and on the value (?) of "water-finding by means of the willow wand." As the quality of a water is frequently referred to, the addition of a short paragraph also on the significance of the results of chemical analyses would have proved useful. The importance of the process of filtration by sand and the nature of its action in removing organisms are properly emphasised, although the instructions bearing on the care and cleansing of filters are not entered into with that detail which the importance of attention to those points demands. The chapter on the corrosion of pipes and the properties of some water-supplies in respect to dissolving lead is thoroughly practical, pointing out the conditions under which water is likely to act upon lead and the remedies which can be successfully applied. On the whole we commend the book, because we think it will serve as an excellent guide, especially in rural districts, to those who require instruction with regard to the conveyance of water from its source and its ultimate distribution.

Sewerage and Sewage Disposal of a Small Town. By E. B. SAVAGE, A.M.I.C.E. Illustrated. London: Biggs and Co. 1895. Price 5*s.* 2*d.*—This is a capital little book for young engineers. It is extremely practical, giving clear and concise particulars of the system of conveying sewage and of the principal methods in vogue for its disposal. These particulars are illustrated in an excellent series of model plans drawn to scale. As a type of precipitate processes the author gives the alumino-ferric process, but he omits to add an analysis of the effluent which would convey to the reader some idea of the extent of purification which this process effects. We observe a slip in the description of the manner in which it purifies. Thus, after the sludge has subsided, he says that a clear and inodorous liquid remains, still retaining the oxygen originally contained in the sewage. Surely it should be nitrogen. He has purposely refrained from entering into the question of sewage purification by bacterial agencies, since these processes, "although destined greatly to modify, if not to entirely revolutionise, can as yet be scarcely regarded as sufficiently developed to be applied by engineers in dealing with the sewage of towns." He adds nothing as to the prospect of ever turning sewage to account. The book is an admirable digest of present purification processes, and is sound in engineering details.

A Plea for a Simpler Life. By GEORGE S. KEITH, M.D., F.R.C.P. Edin. London: Adam and Charles Black. 1895. Price 2*s.* 6*d.*—"We have seen that in sickness neither medicine, nor alcoholic stimulants, nor food (*sic*) are necessary as a general rule, but, on the contrary, are often absolutely

injurious. ..... I have long looked on hot water as the most real stimulant that we have." These quotations, from pages 39 and 42, comprise the essentials of the author's system of therapeutics, which he briefly expounds in a pleasant style and defends with the courage of one who is convinced, and whose personal habits are in accordance with his somewhat exceptional views. The first of these passages can hardly be taken literally, otherwise the unfortunate patient would fare even worse than those under the care of Dr. Sangrado. It is a relief to learn that a favourite prescription with the author in most cases of illness is a mixture of well-diluted milk, lime-water, and white of egg, combining both food and medicine. Dr. Skene Keith began medical study in 1836, took the degree of M.D. at Edinburgh University in 1841, and for the last forty years has used a sparing dietary, especially as regards animal food, to which abstemiousness as well as to complete avoidance of aperients he attributes the fact that he is now "a good specimen of an old man who lives a most simple life." The book is well worth reading, but the cautions against indulging in the pleasures of the table ought surely to have been supplemented by diet tables or some other instructions for the guidance of individuals in ordinary health who may be desirous of leading "a simpler life."

The Methods of Microscopical Research. By ARTHUR C. COLE, F.R.M.S. Second edition. pp. 200. London: Baillière, Tindall, and Co. 1895.—This work conveys in clear and simple language information with reference to the hardening and embedding of animal tissues, and the injecting of bloodvessels, which will be most useful for the beginner. The section on Staining is very inadequate. Many modern methods are entirely omitted, and the instructions for the use of each reagent are very meagre. The concluding chapters on microscopic drawing and photo-micrography are clearly written and will be very useful, and the hints about details of technique throughout the book are evidently the fruit of long experience.

MAGAZINES.

The Practitioner.—This excellent journal has with the new year been enlarged to 112 pages, owing to the addition of a series of articles on Heroes of Medicine and a *résumé* of Medical Literature for the Month. The editorial pages lead off with a disquisition upon the Monstrous Regiment of Nurses—"regiment" being used in its strictly etymological sense. It would seem that the profession, having been delivered from the Queen Log or Gamp rule, are now groaning under the Queen Stork dynasty of the modern nurse. Truly the woes of the modern medical man are as the sands of the sea for multitude. These are, perhaps, but imaginary, but the cases of Surgeon-Captain Fowler and Mr. F. J. Lea, referred to next, are very real troubles, and we sincerely hope that when the military and naval authorities can turn their attention to matters connected with home the case of these officers, who erred (if, indeed, they erred at all) from excess of zeal, may be favourably considered. The original communications include one from Sir William Roberts on Sugar-testing; some interesting cases of Hydatid Mole, by Dr. Champneys; the Curability of Hernia, by Mr. Golding-Bird; Renal Diseases, by Dr. W. M. Ord; and Notes on Empyema, by Dr. Crawford Renton. The hero for the month is the great Vesalius, and the Medico-Literary Causerie "slates" that silly and offensive production, "Les Morticoles," about which we expressed our views on Dec. 8th, 1894.

The Edinburgh Medical Journal.—The first article in this periodical is Dr. Freeland Barbour's dignified and courtly valedictory address to the Edinburgh Obstetrical Society on the occasion of his resigning the presidential chair. Dr. J. W. Ballantyne contributes an inquiry into the Cause of Monstrosities; and a most interesting paper it is, full of out-of-the-way information gleaned from the classics, mediæval writers, and authors like Licetus. Surgeon-Major Macdonald relates a case of Abdominal Transfixion by an Elephant's Tusk. The patient's abdominal cavity having been carefully cleansed and sutured, he recovered. Dr. Robertson continues his valuable series of papers on the Pathology of the Nervous System in relation to Mental Diseases.

The Medical Chronicle, Owens College.—Dr. H. D. Rolleston has an interesting paper upon that distressing, though fortunately not common, disease—Primary Carcinoma of the Larger Bile-ducts. For treatment he recommends as affording great relief in cases where the common duct is involved, a cholecystenterostomy, so as to prevent bile being dammed up in the liver. Dr. W. Milligan has a paper upon Tuberculous Disease of the Middle Ear, and Mr. W. R. Williams one on the Pathogenesis of Cancer.

The Humanitarian for January has an article on Cycle Riding and Racing for Women by Mr. E. B. Turner. The latter form of amusement the author rightly condemns, and the former praises, given the following: "Moderation, again moderation, and loose clothing." To which we would add a very careful regard in respect of a proper form of saddle.

The Photographic News.—This useful weekly (price now 1*d.*) has with the dawn of a new year been enlarged, and several new and attractive features have been introduced. The first number contains an instructive and comprehensive series of well-illustrated articles which are sure to engage the interest of the amateur photographer.

Journal of Mental Science. January, 1896.—The current number of this quarterly contains matter of important clinical interest which should prove acceptable to the general body of the profession. The articles alluded to are the following: Mental Symptoms occurring in Bodily Diseases, Mental Changes in Graves's Disease, Mental States associated with Visceral Disease in the Sane, and Some Points in the Relation of Diabetes to Insanity. The recent proposals regarding habitual drunkards are ably discussed, both from the legal and medical standpoint. In the Psychological Retrospect will be found Professor Fournier's views regarding the Relation of Syphilis to General Paralysis.

Analytical Records
FROM
THE LANCET LABORATORY.

STERILISED MILK.

(THE PURE BACTERIA-FREE MILK ASSOCIATION, LIMITED, "NETHERLAND." LONDON AGENCY: S. DUSSELSMA, 48–48A, OUTER TEMPLE CHAMBERS; 222–225, STRAND, W.C.)

WE have received two samples of milk in glass-stoppered bottles, one of which has been kept for six months during the hottest part of the year, while the other had been recently prepared. Both were quite sterile. Even when placed in the incubator bath—i.e., at blood-heat—for a week no objectionable developments occurred, the milk in both cases being quite sweet and in good condition at the end of the experiment. The samples contained no trace of objectionable preservatives. In spite of the sterilising process, which is carried on at a temperature a little higher than the boiling point of water, the taste was good, and freer than is usually the case from "boiled" or "scorched" flavour, and the colour of the milk had changed to hardly any appreciable extent. There is

no doubt that the success with which this milk has been preserved is due to the particular care which the purveyors take to first free the milk from suspended impurities—which include dirt from the udder, legs, and skin of the cow, or from the hands of milkers, and probably dry particles of dung and dust from the stables—by screening it in a special manner. This precaution is certain to exclude many agencies which excite unfavourable changes in milk, leading to sourness and putrefaction. The quality of the two specimens may be gathered from the following results of our analysis:—New sample: Specific gravity, 1031; total solids, 12·26 per cent.; fat, 3·50 per cent.; non-fatty solids, 8·76 per cent.; ash, 0·78 per cent. Sample six months old: Specific gravity, 1032; total solids, 11·86 per cent.; fat, 2·70 per cent.; non-fatty solids, 9·16 per cent.; ash, 0·68 per cent. Thus, while of fair average quality, these specimens may be trusted as free from the objectionable contamination to which ordinary milk is constantly being exposed.

RADNOR (QUEBEC) SPRINGS MINERAL WATER.

(RADNOR WATER CO., NEW YORK LIFE BUILDING, MONTREAL, CANADA. AGENTS: CUNNINGHAM, SHAW, AND CO., 21, WATER-STREET, LIVERPOOL.)

The Radnor spring was discovered two years ago, during a search for a source of drinking-supply for the use of workmen connected with a large iron foundry. Eventually water was struck at a great depth, after encountering a hard gneiss rocky slab 100 feet in thickness. It proved to be under considerable pressure, since a 4-inch stream was projected some 4 feet into the air, the force proving sufficient to drive it to a considerable distance along the service-pipes to the town. Its composition presents some points of interest. The saline constituents are chiefly common salt (100 grains per gallon), sulphate of magnesia (8·5 grains per gallon), and bicarbonate of soda (14·7 grains per gallon). It also contains 22 grains of carbonate of lime in solution in carbonic acid, the total solid matters amounting to 167·16 grains per gallon. Bromide of sodium occurs in very distinct quantity, the water turning quite yellowish-brown when chlorine water is added to it. The liberated bromine may be readily extracted with chloroform. The water is brilliant, pleasantly sparkling, and of mild saline taste, and is entitled to rank with the well-known waters of the alkaline carbonated and saline type, which are useful as beverages in cases of acidity and likely to serve as a diuretic and mild aperient when taken freely.

ROLLED OATS (ROYAL STANDARD BRAND).

(JOHN INGLIS AND SONS, LEITH, MIDLOTHIAN. AGENTS: JOHN ALEXANDER AND CO., 61, MARK-LANE, E.C.)

These consist of oats flattened into thin flakes and submitted to a new process by which the starch is partly torrefied, a mode of treatment that is said to prevent the development of that bitter flavour which is a well-known objectionable feature of oatmeal that has been kept for some time. This treatment, coupled with the rolling process, adds very materially to the digestive properties of this, the most nutritious, cereal. A porridge made with this preparation possessed a fine, rich, oaten flavour. It affords an excellent and highly nourishing article of diet.

THE NORFOLK EMULSION OF COD-LIVER OIL WITH HYPOPHOSPHITES.

(J. ROBINSON AND CO., 13, ORFORD-HILL, NORWICH.)

This preparation presents the appearance of a perfectly uniform emulsion when examined with the microscope. It contains no alkali, but, on the contrary, is slightly acid to test paper. It is free from the repulsive taste of cod-liver oil, which has been skilfully disguised by the selection and careful addition of aromatic substances. Its value, of course, is enhanced by the addition of hypophosphites, the presence of which we had no difficulty in confirming.

New Inventions.

THE KIESOW PATENT SAFETY LAMP.

In the report of THE LANCET Analytical and Sanitary Commission on Dangerous Paraffin Lamps, which appeared in our issue of Jan. 4th, 1896, there was described a safety hand lamp costing 6½*d.* (No. 18 in the report) which was found by our Commissioners to be on sale at most of the oil shops visited by them. Although this lamp was reported as safe, our Commissioners were led to recommend some slight modifications in its construction which, in their opinion, would make it as secure against accident as a paraffin lamp could possibly be. We have since learned that these structural improvements had already occurred to the makers, Messrs. Kiesow and Co., of 25, Fore-street-avenue, who have recently placed these improved lamps on the market in accordance with the conditions of safety set forth in the report. First and foremost, this lamp is provided with a wick tube projecting nearly to the bottom of the reservoir, and, further, the wick tube, being S-shaped, acts as a safety trap when the lighted lamp is upset (see illustration, Fig. 1),

FIG. 1.

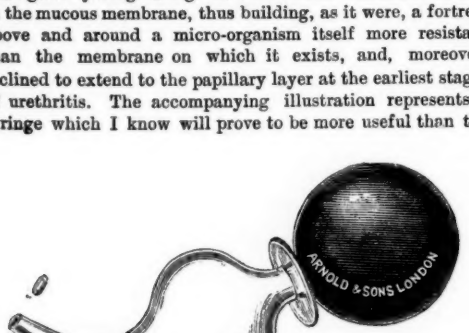
FIG. 2.

and oil cannot possibly escape; the flame simply and quietly goes out. In the earlier pattern of this hand-lamp, as with the one examined by our Commission, the base, as was pointed out, was too small in comparison with the size of the reservoir; it is now much broader, and the chance of the lamp being upset by trivial occurrences is small. The joint connecting the burner to the reservoir, although not a screw, is, we think, an effective and safe one. It differs in a very important detail from the ordinary bayonet catch. The small metal clamps, which grip a projecting collar in the mouth of the reservoir, turn in a perfectly horizontal direction, and in a turn of about two-thirds of an inch the burner is made quite secure, a small notch serving to prevent the joint being turned too far. The mouth of the reservoir to which the burner is thus firmly attached is made in one piece, and is produced by a series of ingenious "stampings" from a single disc of metal. The ordinary bayonet catch of many lamps was condemned by our Commission because these catches or pins were found to turn in an upward direction along and beneath a fixed soldered wire in an inclined plane. The tendency of these catches is, therefore, to slide back again, especially when they are oily, so that the burner is readily detached when the lamp is tilted—an occurrence which actually happened in one experiment with another lamp described in the report of our Commission. The Kiesow safety lamp, therefore, as it is now modelled, fulfils all the requirements of a safe lamp so far as our experiments go, and it cannot be too widely known that such a lamp can be purchased for so moderate a sum as 6½*d.* at the common oil shops. It should be added that table-lamps of the same safe construction are made at prices within the reach of the poorer amongst us. Fig. 2 represents such a lamp, costing (retail) 1*s.* 9*d.* Lamps of the same type, but of higher finish, are also procurable at correspondingly higher prices, as from 4*s.* to 6*s.*, whilst the makers will soon be prepared to place a duplex lamp in the market the wicks of which will be provided with a double S-tube. It should be the duty of the London County Council, we venture to think, to stamp lamps—which, like the one just described, are safe—

with some mark which shall afford the public a guarantee that they are using a lamp which is as far as possible free from danger.

A NEW URETHRAL SYRINGE.

THE obstinacy and relapsing character of urethral discharges, in spite of the very numerous drugs which have from time to time been used, each highly vaunted in its day, but only to fall into desuetude after a time, help to convince me that it is not the medicament which is so much at fault as its mode of application. No surgeon should disparage a drug until he sees personally how it is used and how long in contact with diseased parts. A drug is efficacious not so much in proportion to its strength as to its length of application. In the case in point strong astringent lotions do more harm than good by coagulating the albuminous substances on and in the mucous membrane, thus building, as it were, a fortress above and around a micro-organism itself more resistant than the membrane on which it exists, and, moreover, inclined to extend to the papillary layer at the earliest stages of urethritis. The accompanying illustration represents a syringe which I know will prove to be more useful than the



ordinary form. Only one person in 100, perhaps, knows how to inject properly with the latter. Its nozzle is ill-shaped, and its piston never fits uniformly, so that, firstly, the fluid injected escapes prematurely, and, secondly, even if the piston fits, the urethra is so suddenly distended by the jump of it as to create irritation. The meatus (and part of the urethra behind it) is a vertical slit varying in size. The nozzle of the syringe I beg to introduce to the profession is hence oblong in transverse section, and is conical; it will, therefore, fit and plug any urethra, nor need the lips of the latter be pressed around it. The fluid is in contact with glass only, hence it is always aseptic. I direct the syringe to be used by holding the flange between any two fingers, whilst the thumb of the same hand presses on the elastic ball. With the idea of prolonging the application of the medicament I am experimenting with a clip to hold the lips of the meatus together, so that possibly the patient may go about for a time retaining the solution in his urethra. The syringe is neatly made for me by Messrs. Arnold and Sons, and can, of course, have any capacity.

Finsbury-pavement, E.C. JAMES MACMUNN.

THE VACANCY IN THE GENERAL MEDICAL COUNCIL FOR A DIRECT REPRESENTATIVE FOR IRELAND.

THIS contest continues to excite a large amount of interest and attention. As a matter of impartiality we subjoin communications from our various correspondents.

Our Dublin correspondent writes:—

Considerable interest is still being shown in Dublin and elsewhere in the candidature for the direct representation of Ireland on the General Medical Council, although the time fixed for the election has been indefinitely postponed. Dr. Heard, who has filled the office of Registrar of the Irish Branch Council for many years, has recently resigned, and, pending the appointment of his successor, the arrangements for filling the vacancy on the General Medical Council have been delayed. A meeting of the Irish Central Counties' Medical Association was held at Mullingar on Friday, the 10th, when the following resolution was carried:—

Resolved—That we, the members of the Central Counties' Medical Association of Ireland, considering that we, the provincial medical men of Ireland, should be represented on the General Medical Council by a member of our profession disassociated from the medical schools of Dublin or Belfast, and representative of our own interests, do support the candidature of Dr. MacDonnell, of Dundalk, who has already gained the confidence of his medical brethren while President of the Irish Medical Association.

Our Belfast correspondent says:—

Dr. Cuming's candidature is making most satisfactory progress, and already over 360 medical men have joined his general committee. This is all the more remarkable as he was late in the field and did not canvass before Dr. Kidd's death. It is now quite apparent that Dr. Cuming is the strong provincial candidate, and that, as his executive committee state in their circular, "a favourable opportunity now exists of wresting the representation from a metropolitan candidate." It is understood that the Londonderry (north-west) branch of the British Medical Association at their late meeting passed a resolution pledging the members to vote for a provincial candidate.

From our Cork correspondent we have received the following:—

The election of a direct representative on the General Medical Council is looked forward to with considerable interest in Cork and surrounding districts, especially as it is hoped that an energetic representative may influence the Council in taking some action with regard to certain medical practitioners who do not hesitate to put themselves in opposition to the bulk of the profession in their fight with the clubs—a fight which many consider is absolutely essential to the maintenance of the dignity of the profession to which we all belong. There is also a very decided opinion that the representative should be some gentleman resident in the provinces, as all the other representatives reside in Dublin, and it has been felt that the tendency to centralise in the metropolis all medical appointments of honour and emolument has worked unfairly to the larger body of capable provincial practitioners. In this connexion it may be pointed out that Dublin monopolises an entirely disproportionate number of examinerships of the Royal University. There is surely not a very great disparity in the number of medical students from Cork and Dublin presenting themselves for the degrees of the Royal University, yet there are only three medical examiners from Cork, whilst Dublin has as many as fifteen. The senate of the Royal University appoints the examiners, and the great majority of the senators reside in Dublin or its vicinity. It is well known that a distinguished representative of England on the General Medical Council considers this subject to be one worthy of the attention of the Council in the interests of medical education; it is not surprising, then, that the members of the profession in the south of Ireland have taken active measures for the purpose of securing the return of a representative who would be prepared to support provincial interests, and a meeting was held last Saturday for the purpose of discussing the whole question. It was generally recognised that a Dublin candidate would be sure to win if the three provincial candidates should persist in going to the poll, and it was considered very desirable that some means should be adopted by which two of the three should be induced to retire. The following resolutions, which speak for themselves, were unanimously adopted, and there is every reason to believe that the prudence of the course suggested will commend itself to each of the provincial candidates. It was resolved:—

1. "That in the opinion of this meeting a direct representative of the profession in Ireland should be chosen from the provincial practitioners, inasmuch as we believe Dublin is already fully represented on the Council through its universities and colleges. We therefore pledge ourselves to support a provincial candidate."
2. "That this meeting is of opinion that it is most undesirable for three provincial candidates to go to the poll, and with this view we call on the three provincial candidates to decide by a preliminary poll which will have the greatest number of promises, and that we pledge ourselves to vote for the candidate who obtains the greatest amount of support."
3. "That we request the medical practitioners of the city and county of Cork not to pledge their votes until a single provincial candidate has been selected by a preliminary poll."

THE LANCET.

LONDON: SATURDAY, JANUARY 18, 1896.

WE publish two addresses to local medical societies which show how deeply the profession is stirred by the questions which we have lately raised in our series of articles on medical clubs and the various and hard conditions under which a very large proportion of the medical work of the country is done. These addresses were delivered respectively by Mr. W. G. DICKINSON before the South-West London Medical Society and by Mr. FRANK STURGES before the Beckenham Medical Society, of which he is President. It is gratifying to us to think that both gentlemen should have found their text and their inspiration in the articles to which they both so generously allude; and it is equally so to be able to say that both addresses show a personal grasp of the subject in all its bearings, a thorough fulness of detail as to the evils under which as a profession we labour and the remedies for them which must be applied if the profession is to be saved from degradation and even from destruction. We cordially commend both addresses to our readers and shall be glad to be the medium for publishing similar ones that may be delivered in future. In both of them the point seems to be emphasised, that if the profession is to be kept in its old lines it must be by *local* organisation. We think that at all events for the present this is the proper line to follow, though the time may come when it will be necessary to join forces. The General Medical Council may be able to do something more than it has yet done in this matter; and certainly the medical corporations and the British Medical Association can do more. But even when they have done their most the chief remedy now to be relied on in any locality must be the local public opinion of the profession as expressed in local societies, or rather in the one local society which every resident should make a point of joining. Where such societies do not yet exist they should be created without delay. It is astonishing how soon such societies can be brought into active life and work. Mr. STURGES says: "Our energetic secretary, acting as recruiting-sergeant, worked to such purpose that in less than a month the Beckenham Society was an accomplished fact, and, being formed, if I read it aright, it is not our intention to be a mere figure-head." This is the example and spirit for each locality to imitate. Few localities are without a man that would make "an energetic secretary," and the work to be done is such as can only be done on the spot.

Mr. DICKINSON has supplied us with a phrase defining our object—viz., "professional unionism." He defends the principle of combination, which, indeed, is everywhere approved; but he is properly careful to discourage all that is unseemly in the methods of trades-unionism. Whatever compulsion we may need to apply to working men or their societies, or to any professional brother who seems tempted to advance his own interests at the expense of those of his profession, must be applied with respect to our own dignity, to the nature of our calling, and to the fact that we deal with cases of life and death. But, with due regard to all these, it is possible to bring great influence to bear alike on our clients of the working classes and on our medical brethren. We shall not go far wrong, or incur the disapproval of the reasonable in any class, if we take pains as a united profession to study in every locality the conditions of society and adapt our terms of professional remuneration to the means of the people.

As Mr. DICKINSON says well, "no man is altogether insensitive to the opinion of his followers, and the better his position the more sensitive he is." Therefore he makes a most proper appeal to seniors and consultants to help in this matter. They may have no personal interest in it; but they are the men of repute and will have all the more influence from being personally disinterested. They know that medicine cannot be followed as a profession without continuous education and study, and that the welfare of the profession in all its amenities is dependent on the mutual regard and coöperation of members practising in every grade of society. They can help immensely in the demand for the abolition of touting, of canvassing, and of commercial companies and lay proprietors of clubs, who exploit medical practitioners as if they were so many coolies to be used to make dividends. The working classes are not ungenerous; they are in a condition of unprecedented prosperity; and medical practice is more than ever valuable to them. It should not be permitted that isolated medical men should be allowed to assist them to lower the terms and conditions of medical service without feeling the full weight of the censure of every "man of repute" in his own locality.

OUR contemporary, the *Spectator*, in summing up the results of the labours of the late M. PASTEUR, expressed lately a doubt whether their net effect had been for the benefit of humanity. The writer seems to think that the impulse given to vivisection and the consequent lowering of tone regarding the relation of man to the lower animals, which have (it is alleged) followed M. PASTEUR'S successes in experimental research, must be set as such grave deductions from the worth of his labours as to leave the final balance uncertain. We confess we contemplate this expression of opinion on the part of an able and enlightened journal with feelings of the most lively surprise and the deepest regret. If such views prevail in quarters where a real insight into the motives, methods, results, and prospects of modern science might be fairly anticipated, what can we expect from the mass of men who are ignorant of these things and whose prejudices are so readily excited against anything that is novel and unfamiliar? The future of biological research in Great Britain is, indeed, gravely imperilled if the leaders of cultured opinion question its moral *raison d'être*, dispute its achievements for humanity, and allow its most brilliant exponents to go down to the grave with praise and blame so nicely balanced that we are left hesitating whether their life-work is to be reckoned among those "actions of the just" which "smell sweet and blossom in the dust," or among deeds

which have lowered the tone and smirched the ideals of civilised humanity. Regarding M. PASTEUR personally, we are not inclined to enter upon any controversy. A life of incessant and unwearied labour for the advancement of knowledge and the mitigation of the heavy load of human suffering; a life of much endurance and physical weakness, but of ardent toil and high achievement; a life full of encouragement for a desponding and pessimistic age—such a life needs no defence and can well dispense with praise. But we feel a deep and genuine interest in combating the general principle on which the *Spectator* bases its criticism of M. PASTEUR. That principle would appear to be that the greatest achievements for humanity are too dearly bought if they serve to popularise and extend the practice of scientific experiments upon living animals. This was not always the leading objection to vivisection. There was a time when the anti-vivisectionist argument rested mainly upon a peremptory denial that any real and permanent benefits had accrued from the practice. It was argued that vivisection had seriously impeded and misled medical science by suggesting false analogies and enticing it along paths that lead nowhere. Such arguments seem to be now abandoned, the progress of modern biology and pharmacology having, indeed, deprived them of all meaning. It is even said now that the very successes of vivisection constitute the present danger, and that it specially behoves us to be on our guard lest we blind ourselves to the moral objections to a practice which holds out such dazzling enticements. We leave the anti-vivisectionists to reconcile, if they can, their present with their past attitude on the subject. Logical consistency is not their strong point, and we have no doubt they will again shift the issue if such a course should appear to be demanded by the exigencies of their position.

The real contention just now is this. Vivisection has conferred benefits on humanity and offers the prospect of further and probably even greater benefits in the future; but we have no right to purchase those benefits at the cost of suffering to the lower animals, and if we do so our moral nature suffers in the process, and in the long run the loss to humanity will be greater than the gain. This is a perfectly intelligible argument and one which we regard with unfeigned respect. Cruelty to the lower animals is one of the basest and meanest of vices, and, as CHARLES DARWIN said upon a memorable occasion, is "worthy of detestation and contempt." The real question turns upon what is meant by cruelty. The almost universal practice of humanity permits the killing of animals for food. It is idle to contend that this does not involve immense suffering. The modes of slaughter employed are not, and perhaps cannot be, easy and painless. Even if they were, the mere deprivation of healthful and joyous existence—such as that of the young lamb upon the hillside—must be reckoned cruelty, if we are to be strict in our definition of the term. But we have grown accustomed to these things, and we eat our dinners without any qualms regarding our moral right to our beefsteak or our leg of mutton. Further, the methods of preparing animals for slaughter and for the table are often such as involve great and unnecessary suffering, but our moralists are silent upon the subject of *pâté de foie gras* and crimped salmon. Stronger still is the case of sport. Hunting, fishing, and shooting are all pursued at the expense of much suffering on the part of the lower animals, and the argument is, of necessity, in many cases at least, wholly inapplicable. We are not disposed to assail sport, in defence of which much may be said, but we are deliberately of opinion that there is more suffering inflicted on the English and Scotch moors during a single week in September than in all the biological laboratories of Europe in a year. Can vivisection be condemned and sport exonerated? We hold that the case in favour of the former is incomparably stronger than that in favour of the latter. The advancement of knowledge, the mitigation of human misery, the prevention of disease—surely these are infinitely higher and nobler motives for the infliction of pain than mere healthful exercise and transient enjoyment. We confess to feelings of wonder and indignation when we see the biological investigator assailed with opprobrium while the sportsman is exonerated or applauded, and we regard such an attitude as worthy only of those days when it was a crime to examine a corpse, and when VESALIUS ran the gauntlet of sharp personal peril in laying the foundations of the science of anatomy. Our duty to the lower animals is too large a subject for us to consider here. We repeat that unnecessary cruelty is odious and loathsome, but life is difficult, disease and suffering are terrible realities, and we have no doubt in our own minds that the most enlightened humanity will continue to countenance as necessary and unavoidable the infliction of a measure of pain upon the lower animals for the benefit of mankind.

We cannot do better than conclude by quoting the opinion of that great man and true humanitarian to whom we have already alluded, CHARLES DARWIN. Asked his opinion of vivisection, he wrote in the year 1871: "I quite agree that it is justifiable for real investigations on physiology, but not for mere damnable and detestable curiosity." And on another occasion he gave his opinion that "to prohibit experiments on living animals would be to put a stop to the knowledge of, and remedies for, pain and disease." If our moralists insist upon continuing the war upon vivisection, let them at least preserve some slight shreds of consistency.

THE principle of Direct Representation in Medical Bodies is getting on. It has its ups and downs. And it does not seem to be accepted in its entirety by some of its supporters. One of the most curious instances of this was in the discussion of the principle at a meeting of the Fellows of the Royal College of Surgeons of England on the 2nd inst. As an amendment to the modest motion by Sir ROBERT CRAVEN, "that the number of the council be increased to thirty-two, and that eight of these, who may be Members, shall be elected by the Members only, provided always that no Member who has not been a Member for twenty years shall be eligible to a seat on the council," Mr. HERBERT W. PAGE proposed that it is desirable to give to the Members of the College direct representation on the council to the extent of four Members, who should themselves be Fellows, to be chosen only by the votes of Members, declaring candidly in his speech that he

thought it was undesirable to put Members on the council. To do Mr. PAGE justice, he yielded quickly to the suggestion of Mr. TWEEDY to omit the less generous parts of his amendment, and to be content with the simple, and what will be the historical, averment, that it is desirable to give the Members of the College direct representation upon the council.

But the historical interest will centre not so much in the declaration of the Fellows in 1896, that the direct representation of the Members on the council is desirable, as in the fact that such an expression of opinion should have been deferred so long, and that when made it was so contrived as to take all directness out of the representation and to make it oblique or indirect. It will be the surprise of later generations that such a body as the College, which has ruled so largely in medical education and examination, boasts of a membership larger than that of any other examining body or of all other examining bodies put together, and the Members of which have for the most part conducted the general practice of England for generations, has yet thought so slightly of its Members as to have excluded them from all voice or share in the government and discipline of the College. The argument from history on which Mr. HENRY MORRIS mainly founded his opposition to direct representation of Members would tend to prevent all progress and all change in scientific bodies, and encourage the perpetuation of all the old abuses of which all are now ashamed. Mr. TWEEDY and Mr. GANT and others have done great service in inducing Mr. PAGE to withdraw the limiting words of his resolution, and to approve the principle of direct representation *simpliciter*. It is scarcely possible to believe, after this expression of opinion by a majority of Fellows, that there will be any further hitch on the part of the College in conceding direct representation of Members by either Members or Fellows as the Members may see fit. If ever there was a time when the executive of our medical corporations needed to be strong it is now. The numbers of the profession and the competition which is thereby involved make the maintenance of the discipline and traditions of the profession at once more difficult and more necessary than at any anterior period. But there can be no strength in the executive unless it represents the constituency and unless there is harmony between the various sections of which the constituency consists. The Royal College of Surgeons of England found that, when it went to the Home Secretary for his sanction to a new ethical clause, the opposition of the dissatisfied Members had some influence, and the council had at least to adopt a different form of expression to ensure the acceptance of the proposed new by-laws. In spite of the dogged opposition to direct representation there are many indications that it is giving way, and that the intellectual leaders of corporations are beginning to perceive that such a concession will bring to their councils an element of experience, and even of wisdom—and, above all, of sympathetic coöperation—which can only be to the general advantage.

We must not omit, however, to point out that the concession of direct representation of members of the profession or of any of its colleges makes it incumbent on them to use the greatest diligence and care in selecting such representatives as will sustain the reputation of the principle. The Members of the College seem to give guarantees beforehand that they will not elect rash or untried men. They have proposed that no Member shall be eligible for a seat on the council who is of less than twenty years' standing. They have everything to gain by electing men of the highest repute and standing in all departments of medical knowledge and practice who will represent the principle of direct representation with dignity. To require them to be content with a representation by *Fellows* is rather to mock them than to meet their wishes. This is, of course, not saying that they should be precluded from electing Fellows as their representatives. But it would be little creditable to the Members and to the principle of direct representation if they cannot find in their own order men to represent them. This principle applies to the General Medical Council as well as to single corporations. The representation of Fellows and of official men from schools and hospitals on the Council and in the Examining Bodies is ample enough already. It was not to increase this that the profession spent years in fighting for the principle. What is wanted to ensure the peace and prosperity of the profession and to bring its leading bodies into harmony with itself is a representation of the rank and file, who, we verily believe, will be as jealous for the education and the honour of the profession as those who are drawn from its teaching and consulting ranks.

Annotations.

"Ne quid nimis."

SOME ASPECTS OF THE RECENT MEETING OF FELLOWS OF THE ROYAL COLLEGE OF SURGEONS OF ENGLAND.

THE more carefully the proceedings at the half-yearly meeting of Fellows of the Royal College of Surgeons of England held on the 2nd inst. are studied, the greater reason have the advocates of the claims of the Members of the College to be satisfied with the acceptance of the principle of direct representation of Members of the College on the council by the assembled Fellows. The meeting was the largest, the most important, and the most representative meeting of the Fellows which has yet been held. Three members of the council of the College spoke in favour of the principle, and a fourth, who adopted a neutral attitude, was known to sympathise warmly with the movement, whilst the one member of the Council who spoke against the concession and was the sole speaker on the opposition side certainly made no converts, if he did not influence votes in the other direction. Out of eighty-one Fellows present only seven could be found to hold up their hands against the resolution "that it is desirable to give to the Members of the College direct representation on the Council," whilst at least sixty Fellows held up their hands in its favour. If a similar proportion should be maintained throughout the constituency it would result in showing more than 800 supporters and about 100 opponents of the principle. Be this as it may, the vote and the circumstances attending the vote constitute a very striking evidence of the growth of liberal opinion in the constituency of Fellows since the subject was first discussed at the College rather more than ten years ago. At that period the council sanctioned the issue of memoranda said to have been unanimously adopted by the members of the council against the Members' claims. The present position of the question—

to a large extent the outcome of the policy of establishing separate meetings of the Fellows of the College, and thus affording opportunities for discussion and interchange of opinion—is especially gratifying to THE LANCET, inasmuch as we have never ceased, even in periods when the fortunes of the Members appeared to be at a low ebb, to advocate concessions and to urge upon the council and the Fellows the wisdom and expediency of giving to the Members of the College a share in the government, and thus uniting in harmonious relations all who belong to this great corporation. It will have been noted by our readers that the resolution affirming the desirability of direct representation of the Members of the College on the council has been referred by the council to the committee, which received deputations from the Association of Fellows and from the Society of Members and has not yet sent in a report to the council. What may be the recommendations of the committee we are not in a position to anticipate, but the significance of the vote in favour of the Members is such that it would seem advisable that the views of the entire constituency of Fellows should be ascertained without delay. If these views should prove confirmatory of the recent vote we do not see how the council can any longer hesitate to give effect to them. It is to be regretted that the great length of the proceedings at the meeting in reference to the questions of the representation of the Members of the College on the council and the admission of women to the examinations for the diplomas of the College prevented the full discussion of the case of Mr. R. B. Anderson, thus precluding the Fellows from evincing their warm sympathy with him on account of the grievous wrongs which have been inflicted upon him in the sacred name of justice. The endurance of the audience had been exhausted, and when Mr. Holmes rose to speak a rapid exodus was in progress, so that by the time he came to the end of his remarks the requisite quorum of thirty Fellows no longer existed. The President, therefore, was precluded from putting the resolution to the meeting, which thus came to an untimely end. It would have been a point gained if the support of the body of Fellows to which Mr. Anderson belongs could have been demonstrated at a large meeting, and we sincerely trust that the Fellows will take the earliest opportunity to lend at least their moral aid to Mr. Anderson in his courageous efforts to obtain redress, to vindicate the rights of medical practitioners, and, if necessary, to secure an amendment of the law. There was one other incident at the meeting to which we wish to allude. Before the commencement of the proceedings two reporters had been admitted and had taken their seats near the well. These "strangers" were soon discovered and were requested to withdraw; they were at once obedient to the injunction of the President. The exclusion of reporters is thought by the officials of the College to be necessary in order to emphasise the informal character of the meetings of Fellows; but would it not be for the advantage of the profession and the College, that the proceedings should be properly and completely reported in the medical press? This is a subject which we commend to the careful and favourable consideration of the council of the College.

THE TRANSVAAL AND DR. JAMESON.

THE political horizon has undergone a sensible change for the better, although it cannot yet be said to be free from disquieting clouds. Notwithstanding that we have ascertained many details regarding Dr. Jameson's raid, we are still very much in the dark as to the actual causes which led to its being undertaken and the exact motives that actuated its leaders. Who signed and sent the document and plan that are stated to have been found after the fight was over? Unless it had been represented to Dr. Jameson that the people of Johannesburg were in great straits and that a large force was ready and waiting to effect a junction with him on the appearance of his force, his expedition could only have been what it proved—a hopeless undertaking. As it was, the agitation in Johannesburg had no backbone; it seems to have had no organisation or plan of action, and the raid across the border of the South African Republic went as straight into a position from which there was no escape as a rat or a bird into a baited trap. The raid, whether successful or unsuccessful, was no doubt a most illegal and indefensible action; but, apart from its grave political aspect, it was bound to be unsuccessful. The position attacked was an impregnable one; the attacking force, instead of being a preponderating body, was ridiculously inadequate for the purpose, besides being insufficiently supplied with food, water, and ammunition, and neither the men nor their horses were equal to the strain to which they were subjected. Now, Dr. Jameson's previous career had proved that he was a man of ability and cool judgment as well as courage and daring, and he had for comrades in his desperate enterprise professional soldiers. It seems impossible, then, to suppose that they would have started on such a service unless they had been dominated by a conviction that it was absolutely necessary to undertake it, and at once. On the other hand, was it only the outcome of a badly designed plot formed long before? As far as we are at present in possession of the facts, it would certainly seem to have been a hopeless and unwarrantable expedition; but it is only fair to add that we are not yet in possession of all the facts. One side of the unfortunate story has been told, but it leaves us altogether in doubt as to the reasons and motives that actuated the leaders of the raid against the Boers. What were the antecedent and attendant circumstances? Who were the real movers and instigators of the plot—if plot it was? What part did Colonel Rhodes, who was present in Johannesburg, take in the business? Why did not President Krüger, if he was aware of any widespread plot, warn the High Commissioner and prevent its accomplishment? What the public like is, after all, a good advocate, one who strongly takes up one or other side of a question; but that is manifestly not the way to get at the truth. We must know a good deal more than we do at present before we can say how far Dr. Jameson was to blame and deserving of censure or not; and this we trust we shall learn later, when he and those acting with him have had an opportunity of speaking. The distress of the wounded from want of water must have been considerable. We are glad, however, to notice that all accounts agree in saying that they were well cared for as soon as they fell into the hands of the Boers, who seem to have behaved with a consideration and humanity that were most creditable to them under the circumstances.

IF THEATRES, WHY NOT CHURCHES?

A CORRESPONDENT of the *Times*, in a letter dated Jan. 7th, points out a custom existing in sundry churches, of the kind known as fashionable, which is a real danger to the community. He draws attention to the fact that at St. Margaret's, Westminster, the aisles and the nave are blocked up with chairs, and that, with regard to another fashionable church, St. James's, Marylebone, the Rev. H. R. Haweis writes: "I have more than doubled the legal number of free seats by means of chairs, camps (*sic*), and slabs." We regard this as a highly objectionable practice in two respects—firstly, on account of the danger of blocking the exits in case of panic; and, secondly, because of the injury to health caused by cramming a building to its utmost capacity. Churches are never too well ventilated, and there should be a definite limit imposed upon the numbers of the congregation. We

may mention another church, which from its position should set an example to others, where overcrowding is prevalent. At Westminster Abbey, on a Sunday afternoon when a popular preacher is announced, the choir and transepts are packed, the congregation even sitting with their backs to the altar, on the altar steps. Now, Westminster Abbey has a nave, and the nave is the proper place for the congregation. If people would only get into their heads that a sermon is not worship, and if the sermon were preached by itself, as it is at the universities, crowding would be done away with, and worshippers would not be interfered with by well-dressed curiosity-seekers. The correspondent, upon whose letter we have been commenting, says: "If any manager were to persist in blocking up the gangways of a theatre or music-hall in the way the aisles of a large number of churches now are, he would run a very great risk of losing his licence." This is perfectly true; but if the guardians of churches persist in disregarding the ordinary laws of health and safety means will have to be taken to render them amenable to reason.

THE NEW PHOTOGRAPHIC DISCOVERY.

WE are in receipt of a communication from Mr. A. A. C. Swinton, who states that he has during the past week made some investigation with the view of confirming Professor Roentgen's discovery, to which we referred last week. He has obtained distinct proof that the radiations in question do pass easily through various substances that are quite opaque to ordinary light, and produce strong impressions upon ordinary photographic plates entirely encased in light-proof material. Indeed, all substances that he has so far experimented on in his laboratory appear to be transparent to these radiations, even sheets of ebonite, carbon, vulcanised fibre, copper, aluminium, and iron, though there is considerable variation in degree. He has also obtained a photograph of a human hand, which shows very distinctly the shape of the bones with their joints in several of the fingers. With confirmatory evidence like this before us from an independent investigator the possibility of the application of this discovery as an aid in medical and surgical practice is a shade nearer probability.

DEATH UNDER NITROUS OXIDE GAS AND ETHER.

A death under anæsthetics was briefly recorded in THE LANCET of Jan. 4th, the patient being a fairly well-nourished woman aged twenty-six, not markedly anæmic. She had been suffering from cystitis for six months previous to her admission to Guy's Hospital on Nov. 13th, 1895, and for some weeks had been unable to sleep for more than a few minutes at a time owing to frequency of micturition. There was some tenderness and pain in both renal regions, but no definite tumour could be made out owing to rigidity of the abdominal muscles. The temperature on three occasions reached 103° F. The heart and lungs (after repeated examinations) were considered to be free from disease. On Dec. 2nd nitrous oxide gas was administered and taken satisfactorily. Two full inspirations of air were then allowed, and an Ormsby's inhaler (charged with half an ounce of ether purissimus) was applied. The breath was held at first, but soon became regular. After the fifth regular respiration the pupils, which had been moderately contracted, became widely dilated, the temporal pulse could not be felt, and all respiratory efforts ceased. There was very little lividity, and no muscular movements were observed. The mask was removed, the end of the operation-table raised, and artificial respiration performed. Air passed freely in and out of the chest. Inhalation of amyl nitrite was then tried, and slight voluntary respiratory efforts were noticed, which, however, soon ceased. The pulse had entirely ceased to beat. Total inversion and galvanism were then tried, but with no effect. Post-mortem examination was not directed by the coroner. It is a most extraordinary thing that so important and mysterious a case should be left unexplained because a coroner does not authorise a necropsy. The usual verdict of a coroner's court is at best most unsatisfactory in cases of death under anæsthetics, and in this one particularly it is so because no possible evidence was produced to show why a fairly healthy woman should die in the manner she did. As far as the evidence goes, death appears to come under the heading of Caspar's neuro-paresis. We have recently published Dr. Lauder Brunton's exposition of such cases and have little doubt that this patient died through shock, and that the anæsthetic, although an adjuvant, was not a determining cause of death.

LEAD IN LEMONADE.

IT has been said that the public are not poisoned now, thanks to the provisions of the Food and Drugs Act, but only cheated. Milk, beer, and spirits are watered, coffee is mixed with chicory, butter with foreign fats, and so on, the adulterant in each case being comparatively harmless. We have not reached Utopia, however, in this matter, and we hope that the authorities who are supposed to keep a strict watch over our articles of food will not fail to notice a case in point which came before a bench of magistrates this week. A mineral water manufacturer was summoned for selling a syphon of lemonade which, on analysis, proved to contain 0·018 per cent. of lead, or about one-sixth of a grain to the pint. The defendant pleaded guilty, though the Bench did not think there was any intention to infringe the law. He was accordingly fined in a nominal penalty. Mineral water machinery is now so carefully and well made with a view to exclude metallic contamination that this conclusion was probably correct. The lead was doubtless introduced in the citric acid employed, and we hope the authorities will trace this ingredient to its source. True, the quantity of lead found was small, but then it is a cumulative poison, and the continued consumption of such a contaminated beverage could easily lead to serious results. The case only shows the importance of including all articles of consumption for submission to the public analyst from time to time, and the unwisdom of taking for granted that certain of them are sure to be free from suspicion because of the greater intelligence of the present day.

WHOLESALE MORTALITY AMONG NURSE-CHILDREN.

IT is, to say the least, somewhat discreditable to our system of social management that under it such abuses as those connected with the rearing of nurse-children continue to exist and here and there even to flourish. It cannot be questioned that they have been checked by recent legislation. Still they continue, and this under the very cloak of registration. Some days ago an inquest was held in Lower Edmonton respecting the death of an infant, the last of ten which had succumbed under the charge of one woman within fourteen months. She was registered to receive four children—a sufficient number, surely, for one person to feed and attend to—and her record of results could not have been much worse. The child had, of course, the usual history—illegitimacy, a period of healthy growth just after birth, a weakly, ailing after-stage, and in a few months death from mere waste of tissue. Constitutional delicacy may perhaps in part explain such a result, but it is idle to contend that it can, save in an altogether trivial degree, account for a retrospect so uniformly disastrous. The post-mortem evidence in almost all cases of this kind reveals

no definite disease. All that is found is the proof of starvation in every tissue. To aid this reading of the facts we have commonly a history of insufficient or of wrong feeding, each in its own way mischievous, and ultimately fatal. Nature cannot under the circumstances be made a scapegoat for consequences the prevention of which is well within the control of her human instruments, and neglect, if it cannot be ascertained by hourly observation in these cases, is clearly exposed by such evidence as exists. Unfortunately, it is often sufficient merely to neglect an infant in order to assure its death. The treatment appropriate to this form of social evil has already in part been utilised. In registration, if properly employed, we have its most natural remedy, but this, to be effective, should go further than it now does. It should be applied with no less care than in the case of orphan children of a more advanced age who are boarded out, and, as we have always contended, it ought to be required in the case of persons entrusted with the care even of a single child. Inspection, careful and methodical, must likewise form an essential part of the arrangement, not only prior to the reception of children, but periodically afterwards during the period of nursing or adoption. About this there should be no great difficulty, and surely registration, if it is to be of any real value, must take account of the character, history, and competence of those who live and work under its guarantee. Such duties as these should impose no heavy burden on parochial authorities, to whom they might most naturally be entrusted.

BOOKS AS DISSEMINATORS OF DISEASE.

MR. R. H. SHERARD'S[1] notes in the *Author* are always interesting, but they do not often treat of matters that specially concern the medical profession. In the last issue of our contemporary, however, the Parisian correspondence contains the following allusion to the transmissibility of infection by means of books. "At a recent sitting of the Académie de Médecine two doctors, MM. Cazal and Catrin, declared very emphatically that the risk of contagion by the use of books which have been in the hands of persons suffering from infectious diseases is a very great one, and they described a number of experiments by which they had established the truth of this statement. One is glad to hear that the risk is greatly enhanced in the case of those objectionable persons who moisten their fingers in order to turn over the leaves." There can be no doubt that the contagion of certain disorders may be conveyed in the manner described, and that the transference of noxious germs is much facilitated when the pages of a volume are manipulated by the help of saliva-moistened digits. It is astonishing how widespread the latter practice is even among people who pride themselves on "culture." An observer has only to pay a visit to a public library if he wishes for ocular proof that fully 75 per cent. of the readers are addicted to the reprehensible habit. Among skilled artisans it is well-nigh universally prevalent, although the manual dexterity they are bound to have acquired might be supposed to render it unnecessary. Persons whose tactile sensibility is not very acute for lack of cultivation may be excused if they find it difficult to separate the leaves of a new book, especially when the paper is thin. With such a damp finger and thumb are almost a necessity, and if small sponges saturated with some harmless antiseptic fluid and fixed in suitable receptacles could be provided for them in reading-rooms they would, no doubt, be grateful. Mr. Sherard's advice to studious people is "never to borrow books, but for each man and woman to buy his or her own copy." Were this advice followed the risk of contagion *ex libris* would unquestionably be reduced to a minimum, but we fear that MM. Cazal and Catrin's *communiqué* will not cause enough panic to relax the purse-strings of the reading public to any appreciable extent. In this connexion we may draw attention to another unseemly, but extremely common, usage, which is likewise calculated to assist in the dissemination of disease. We allude to the application of lead-pencils to the lips before use. Doubtless the danger of conveying infection in this way is not very great, because pencils for the most part are the private and exclusive property of individuals; still there are cases in which these implements are provided *pro bono* (or *malo*) *publico*. As examples we may mention telegraph offices, attendance registers, visitors' books, &c.

[1] We must apologise if we have misspelled the author's surname. In the signature to his letter there is only one *r*, but in the table of contents there are two.

TAKING THE OATH IN COURTS OF LAW.

WE are glad to see that his Honour, Judge Emden of the Lambeth County Court, has had notices posted up calling attention to the fact that "the book" need not be kissed when taking an oath. The officers of the court are also instructed to tell witnesses when being sworn that they need not kiss the book unless they like. This is a most salutary and wholesome decision, and we hope Judge Emden's example will be followed by every court in the kingdom. We wonder whether the worthy people who are horrified at the kissing of the Gospels being left out have any idea of what kissing the book really means. They probably think that the Gospels are used as the printed word of God. But the origin of using them is not so. The use of the book was a form of calling upon the saints "to witness if I lie," and the old form of taking an oath was *to lay the hand upon the book*, saying, "So help me God and the Holy Gospels," meaning the writers thereof. The book was on rare occasions kissed as well, but the old form existed for a long time after the Reformation, and it was only Protestant scruples that brought in the alteration, omitted any verbal reference to the Gospels, and made the kissing obligatory. So, for once, sanitary common sense and Catholic antiquity go hand in hand.

TUMOUR OF THE CORPUS CALLOSUM.

IN the last number of *Brain* Dr. W. B. Ransome gives an account of an interesting and unusual case. A woman aged twenty-four, married for two and a half years, sought advice on account of general nervousness and fits. Her family history showed a neurotic strain, and since marriage she and her husband had led a restless, pleasure-seeking life, indulging freely in alcohol, although not in such quantities as to cause intoxication. The patient had never been pregnant, and there was no history of syphilis, either inherited or acquired. Her first fit occurred two years before she was seen, after a mental shock. They had subsequently occurred as often as every other day; latterly, however, only once a week. The fits were preceded by excitement and a peculiar sensation in the temples. Spasms then occurred in the left hand, consciousness was lost, and although the tongue was not bitten there was occasionally involuntary escape of urine. For six months there had been prominence of the eyes, palpitation and sweats, but no enlargement of the neck. When she was treated as an out-patient the fits ceased, but the excitement increased, so that six weeks after she was first seen she was admitted to hospital, being then in a semi-maniacal condition. There were slight general tremors, the knee-jerks were normal, and there was distinct commencing optic neuritis in each eye. She improved for a month. Then she had a rise of temperature and a fit in which the left side of the mouth was drawn up, the eyes were turned to the left, and the left hand was clenched, while the left leg and arm were rigidly extended, and the former twitched

occasionally. Similar fits occurred for about a week, and the optic neuritis became more distinct; but improvement then began, she gained in weight, and the fits, and the headache and sickness which had usually succeeded the fits, also ceased. She was sent home and during the next two months her condition remained almost stationary. The optic neuritis persisted, however, and without the development of any fresh symptoms she suddenly died five months after she was first seen. On examination of the brain a tumour was found between the cerebral hemispheres, springing from the middle of the corpus callosum and bulging slightly into each lateral ventricle. It was about the size of a Tangerine orange, greyish in colour, and very soft. Its margins were well-defined, and its structure was found to be that of an oval-celled sarcoma. The rest of the brain was healthy. Dr. Ransome enters into an exhaustive discussion of the symptomatology of tumours of the corpus callosum, and, as a result of an examination of the various published cases, he gives the following indications for diagnosis of this condition: (1) gradual mental change; (2) moderate headache, vomiting, and optic neuritis; (3) hemiparesis with rigidity, with or without convulsions; (4) or convulsions without paresis; (5) integrity of cranial nerves; and (6) little or no change in the tendon reflexes. But even these, he says, are by no means certain diagnostic signs. The paper concludes with an interesting and instructive discussion of the functions and relations of the corpus callosum, and a list of published cases of tumour of that body, with the prominent symptoms in each. Mental change seems to be almost the only constant one, and the character of the change varies in the different cases.

THE VALUE TO THE COMMUNITY OF A PURE MILK-SUPPLY.

DR. NIVEN recently gave an address to the members of the Hulme Healthy Homes Society on Disease and Dirt. After speaking of defective drains and middens, and the soakage of the soil with filth, he went on to consider the milk-supply, saying that if we can plume ourselves on our good water we cannot on our good milk. Much that he said will apply to most of the towns in the country, for milk is treated in a rough and careless fashion. Samples obtained the previous day showed a thick layer of dirt, which was a mass of micro-organisms, "many of them probably capable of setting up disease." "Such stuff," he said, "should not be sold for human food"; and, talking of the various diseases that have been communicated by milk, he contrasted the care and cleanliness shown in Denmark with the uncleanliness often exhibited in our dealings with milk. "Here we are contented to drink stuff fouled at the farm, fouled in transit, often exposed to dust on the way, and again exposed to dirt in the shop." Of the 60,000 quarts or more used in Manchester every day, most of it, he thinks, is more or less dirty, and anyone who has been accustomed to notice the slovenly way in which milk is generally treated will quite agree with Dr. Niven. This is an age of feeding-bottles and artificial foods for infants, either from the physical incapacity of one class of mothers or from the social demands for which another class sacrifices the welfare of their offspring, and it would be well if the following remarks by Dr. Niven were taken to heart: "A recent investigation which I have made into this matter shows that, so far as my figures go, children fed by hand or bottle, either entirely or only in part, during the first three months of life are fifty times as likely to die of fatal diarrhœa as breast-fed children." In view of the condition of the milk-supply under our present arrangements, "all milk should be boiled on arrival, and no milk which has not been recently boiled should be given to an infant. Boiled milk is not the natural food of young infants, but if cow's milk must be used it is better so to use it than to run the risks involved in taking it unboiled." It would surely be worth while for the farmers of the district to do their part in supplying pure and clean milk.

A CASE OF TRANSPERITONEAL LIGATURE OF THE COMMON ILIAC ARTERY.

WE shall publish shortly an account of a successful case of transperitoneal ligature of the common iliac artery for diffuse traumatic aneurysm of the external iliac and common femoral arteries. The operation was performed by Brigade-Surgeon-Lieutenant-Colonel W. F. Stevenson, Professor of Military Surgery in the Army Medical School, Netley. It is, we believe, the first time that the transperitoneal ligature of this vessel has been performed.

M.D. U.S.A.

THE quack, Ferdinand, who was recently fined £20 and costs by Mr. Sheil at Westminster, had the impertinence to appeal against the decision. His counsel argued that he, Ferdinand, possessed a diploma from the University of Philadelphia. This contention was disallowed by the Court, and, in addition, Mr. A. G. Bateman, the secretary of the Medical Defence Union, writes to the *Times* of Jan. 14th, saying that, had it been necessary, the Union were prepared to show that the *soi-disant* University of Philadelphia had its charter revoked in 1879. The penalties for falsely assuming medical titles and for other forms of fraud connected with medicine are not nearly severe enough. Medical education is costly and lengthy, and it is but the duty of the Legislature to protect those who have spent time and money and undergone examinations against quacks of the Ferdinand type. With regard to quack medicines, which make their proprietors' fortunes, every one of them should be compelled to be patented, a heavy fee being charged, and a description of the materials of which they are composed printed on the package in which they are sold. It is hopeless to protect the average public against itself, nor, we take it, is it necessary; but some steps might be taken to manage to distribute among needy and struggling practitioners some of the thousands of pounds annually wasted upon decoction of aloes.

A SEQUEL TO SELF-TREATMENT.

A CASE of death which last week formed the subject of inquiry in the Brighton coroner's court is of interest as bearing upon the question of liability for the consequences of empirical treatment in disease. A servant girl aged twenty-four years died suddenly from apoplexy. She was said to have been suffering from anæmia, and she had recently undergone a course of drug-taking, which was dignified with the name of the "Viavi" treatment. To unravel with certainty the obscure pathology of such a case is not quite a simple matter. Hæmorrhages in anæmia are of course not infrequent, though we do not, save in aggravated cases, expect to find them occur thus early in life in the more deeply situated tissues. Similarly there are means of medicinal treatment which, if used by the reckless or the ignorant, are apt to induce this among other grave consequences. What may be the nature of the "Viavi" nostrum we are unable to say. The secret of its action is evidently too precious a thing to be submitted to the critical eye of the medical practitioner, for none of its promoters have been candid enough to enlighten us on this subject. It is to be regretted that an opportunity for analysing this mystical product was allowed by the coroner's jury at Brighton to pass unutilised, and we would express a hope that the local sanitary authorities will devote a share of their attention to its examination. If no result of importance

be arrived at we shall at all events have learnt that there is nothing to reveal save the craft of charlatans and the folly of their dupes. If, as has been suggested, we have to do with a remedy capable of mischief, it is time that this fact were published. This incident is instructive in another way. It suggests very forcibly the question, Who was responsible for the mismanagement which allowed an inexperienced girl in weak health to drift through the hazards of chance diagnosis and treatment to a death which, for aught we can see, might have been prevented by the timely employment of rational methods? Neglect and the loss of time are in cases like hers almost, or even quite, as mischievous as the use of erroneous means of cure, and the blame for such neglect must rest not only on herself but on relatives and others with whom she was daily brought into contact.

DANGEROUS TRADES.

THE secretary of the Dangerous Trades Committee, Commander Smith, R.N., Heatherley, Sheffield, will be glad to have witnesses tendered for the purpose of giving evidence in the following trades:—India-rubber works; paper staining, colouring, and enamelling; dry cleaning; basic slag works and manufacture of silicate cotton; electric generating works; sole-stitching by American machinery; glass-polishing; file-cutting; bronzing and metalachrome powder in lithographic works; flour mills; use of converters in metal works; use of steam locomotives in factories; licking of labels for reels in thread mills; use of inflammable paints in shipbuilding yards; galvanised iron works; the process of dyeing with arseniate of soda; the manufacture of grindstones and emery wheels; the use of lead in various forms in print and dye works; the testing of bottles by compressed air; and the bottling of aerated waters. We doubt not that this invitation will meet with a hearty response, seeing the very wide range of industries which are involved. With such a number of witnesses the labours of the committee will be protracted, but the grave importance of the subject demands a careful hearing, if legislation is to be brought to bear, as we hope it will be, to alleviate as far as is possible the prejudicial effects upon the health of the operatives concerned, and the risks of accidents to which those engaged in these peculiar trades are liable.

"INTRA-UTERINE VENTROFIXATION."

THE December number of the *American Journal of Obstetrics* contains a paper by Dr. Shober on Operations for Retro-displacement of the Uterus. He briefly reviews the various operations that have been designed for correcting this displacement and then goes on to describe one which he himself recommends for cases where there are no adhesions, and for which he proposes the name "intra-uterine ventrofixation." An incision about an inch long is made in the middle line of the abdomen, about an inch and a half above the symphysis pubis. This is only carried through the skin and fat. The incision is covered with gauze while the next step of the operation is proceeded with, which consists in the full dilatation of the cervix, followed by a thorough curetting of the fundus. The patient is then placed in the Trendelenberg position. A long cannula is passed into the uterus up to the fundus, and with this the fundus is pressed against the anterior abdominal wall, opposite the incision already made there. A long needle eyed at the point is then passed through the cannula and made to perforate the fundus and abdominal wall at the place of the incision. The needle is thereupon threaded with strong catgut or kangaroo tendon and withdrawn; it is now passed up again and made to perforate the same structures as before, but at a short distance from its previous path. The needle is unthreaded and removed, leaving the two ends in the abdominal incision. These are now tied after a small nick has been made in the deep fascia to receive the knot. The incision in the abdomen is then closed. One of the chief advantages claimed for this operation is that it does not require the opening of the abdomen, and that it produces much the same result as ventrofixation by the modified Leopold operation. By this method a ribbon-shaped adhesion some two inches long is produced between the fundus and the abdominal wall. The sutures were found encysted in the middle of the adhesion in two cases here referred to. When abdominal section has to be performed Dr. Shober prefers the modified Leopold method. In this one or two sutures are passed near the lower angle of the abdominal wound, through the rectus and parietal peritoneum of one side, then through the posterior surface of the fundus and through the parietal peritoneum and rectus on the other side, and then tied. The deep fascia is not included in the stitches. The fundus uteri is not scarified in the modified operation. We confess to having doubts of the safety of intra-uterine ventrofixation by Dr. Shober's method without opening the abdomen. It appears to involve a considerable risk of wounding intestine or omentum, or even of including a part of one or the other in the stitch. If operative treatment has been decided on, the modified Leopold operation seems to us to deserve the preference.

THE HYGIENE OF WAR.

IN these days of disquieting rumours and armament to the teeth it is well to consider what war means and to refresh our minds regarding the expenditure of human life when international disagreements culminate in an appeal to arms. A work recently undertaken by Dr. Paul Myrdacz, Staff-Surgeon-Major in the Austrian Army, and one of the most active members of the Austrian Sanitary Commission, bids fair to supply reliable data to all persons interested in military vital statistics with reference to active service. At present only two fasciculi have been issued, the first entitled "Das französische Militär-Sanitätswesen: Geschichte und gegenwärtige Gestaltung" (the French Sanitary Service: its History and Present State), and the second "Sanitäts-Geschichte des Krimkrieges, 1854–56" (Medical History of the Crimean War), but the writer intends to prolong his labours with a view to the production of a veritable encyclopædia of everything appertaining to medico-military subjects. Among the more important subdivisions of this gigantic work are the following:—Organisation of the health departments in the principal armies of Europe; a medico-chirurgical history of recent wars; the effects produced by modern projectiles; a general review of improvised hospitalisation and transport. That so vast a programme demands collaboration will be readily conceded, but, although Dr. Myrdacz has been fortunate enough to secure the aid of Drs. Kirchenberger, Habart, and Gchirhakl, he nevertheless retains the lion's share for himself. A French writer (R. Longuet), criticising the first fasciculus, says: "The existing organisation is very accurately described in accordance with the regulations of 1889 and 1892. The little volume is very compact; its seventy-five pages allow nothing of importance to escape and will do more to inform foreigners regarding the French sanitary service than any other similar work heretofore published." In compiling his history of the Crimean war Dr. Myrdacz not only utilises the classical works of Chenu, Longmore, and Pirogoff, he has also been able to consult many other medical historians of lesser fame, besides having had access to unpublished documents. Amongst the writers here alluded to are Horsetzky, Anitschkoff, Gähde, von Hüblenet, and von Hasenkampf. Medical officers of the Austrian army are obliged to satisfy examiners regarding their knowledge of the Crimean campaign, with

especial reference to sanitary matters, before they can be promoted, and it was in order to act as a text-book for this ordeal that the present fasciculus was originally written. It contains a complete *résumé* of the chief events during the memorable siege of Sebastopol. Details concerning the military operations are given side by side with a full account of medical and sanitary procedure, the whole forming an animated recital of a most important campaign.

THE BRITISH GYNÆCOLOGICAL SOCIETY AND HOMŒOPATHS.

THE resolution passed with but four dissentients at the general meeting of the British Gynæcological Society to the effect that it is inadvisable to admit homœopathic practitioners to the society is one which will meet with the approval of all who correctly appreciate the scope and work of such bodies. So long as the homœopath claims to deal with diseases on a fixed principle which is inferentially capable of being applied to every branch of medicine, it is manifestly absurd to invite his coöperation in discussion of practical and scientific subjects. Gynæcology, it might be thought, had little in common with homœopathy; but where would be the gain either to knowledge or to art by permitting the introduction into the arena of a body of practitioners who are bound by their dogmas to view all subjects in one light? The society has acted wisely in declining to encourage the membership of so discordant an element, the presence of which cannot possibly be held to be an advantage to the cause of truth.

THE RELIGIOUS NEWSPAPER AND IMMORAL ADVERTISEMENTS.

MOST persons must have noticed how advertisements of proprietary medicines are generally accompanied by appreciative testimonials from some "minister," and how also the quack advertisement flourishes mostly in the columns of the religious paper. To advertise frauds is bad enough, but nothing to the sin of advertising abortefacients and so-called remedies for nervous exhaustion. We have received a copy of a paper called *The Church of To-day*. Its theology seems somewhat uncertain, but that is not our concern. Suffice it to say that the word "church" presumably connotes "morality and religion," as the School Board used to say, therefore it is somewhat startling to find in its columns advertisements of the most infamous description. On page 3 are two—the first addressed "to the married and those intending to marry," recommending "my new book, which treats ..... of large families with a check." The other is "The Private Medical Adviser, with Diagrams and Instructions for the Self-cure of Nervous Debility ..... the results of youthful indiscretion, &c., &c." In close juxtaposition is an advertisement to "Religious Enquirers" recommending works about a certain sect. On page 4 are two advertisements recommending in the most bare-faced way preparations which are certainly calculated to produce abortion. We happen to have a bottle before us of the preparation named in the latter of the two advertisements; the price is 11*s.*, and it is labelled "Must not be taken by those expecting to become mothers." The next advertisement to this is headed "Liberal Christianity." On page 9 is an article or advertisement, we are not sure which, setting forth the virtues of a sure remedy for nervous exhaustion and loss of sexual power. Now we contend that advertisements of this class would be infamous anywhere, but they are infinitely more so in the columns of a paper ostensibly devoted to religion. Other religious papers we have examined—the *Guardian*, the *Church Review*, the *English Churchman*, the *Tablet*, the *Christian*, and the *Christian Herald*—are, we are glad to say, free from blemishes of this kind. True, they all insert advertisements of quack remedies, but there is nothing about "obstructions" or sexual weakness. The *Tablet* has two advertisements which were better away concerning pills for females, but it is possible to put an innocent construction on them. Advertisement is a necessary part of modern commercial enterprise, but it is not too much to ask that it should be conducted with some regard for decency, and that means for committing a crime which is banned by both civil and canon law in every civilised country should not be offered at either 4*s.* 6*d.* or 11*s.* in the columns of the public press, more especially in the "Church" section of it.

THE UNIVERSITY OF LONDON.

THE meeting of Convocation on Tuesday next, the 21st inst., will be a most important one, and is sure to be largely attended. Dr. Silvanus Thompson will move: "That this House desires the early introduction into Parliament of a Bill for the reconstitution of the University similar to that introduced last year by Lord Playfair, but with an inserted clause securing to the Senate, to Convocation, and to other bodies affected the right of appeal to the Privy Council on any of the provisions which may hereafter be settled by the Statutory Commission." This motion will be met by Dr. Napier with the following amendment: "That, in view of the fact that Convocation numbers about 4000 members, most of whom are precluded, by their avocations and distance from town, from attending a meeting in London, and of the desire recently expressed by the Lord President of the Council to ascertain the opinion of country graduates, it is inexpedient for this House to express any opinion as to the desirability of legislation for the reconstitution of the University of London until, in compliance with the desire of the Lord President of the Council, the views of all members of Convocation have been ascertained." The debate is certain to be a very animated one, and the division list will be eagerly awaited, as the relative numbers on the two sides must exercise a great influence on the ultimate decision of the Lord President and the future of Lord Cowper's scheme of reconstitution. Urgent whips are being circulated by both parties.

DIPHTHERIA AND PSEUDO-DIPHTHERIA.

IN another column a correspondent, "M.D.," records an experience which is far from being unique and is, we imagine, becoming increasingly gained. It concerns the difficulty incurred in attempting to correctly designate forms of infective and membranous sore throat in which bacteriological examination fails to detect the Löffler-Klebs bacillus. The whole tendency of modern investigation is to limit the specific disease—diphtheria—to those cases in which this microbe is present in the exudation. This position is supported by the experimental proofs of the specific action of the toxines produced by this bacillus. But side by side with this specific disorder is a series of throat affections in which streptococcal and other organisms are alone present, and the clinical aspects of which have led to many a diagnosis of diphtheria. There can be no doubt that these pseudo-diphtherial cases, arising, as they often do, in association with the true disease, and favoured in their development, it may be, by similar conditions of environment, should rather be put in a category apart and provisionally classed as "septic." Nor does the coexistence of a scarlet rash in such cases necessarily mean that the scarlatinal virus has anything to do with their occurrence, for an exanthem closely resembling that of scarlet fever is a recognised attribute of septic infection. It is safer perhaps,

with our present diagnostic powers, to continue to notify such cases as "diphtheria" or "scarlet fever," according to their predominant characteristics; but it may reasonably be expected that the progress of bacteriology will one day afford the basis for the differentiation of the members of a somewhat heterogeneous group of affections.

THE REGISTRATION OF NURSES.

A CONFERENCE on the legal registration of nurses was held in the council-room of the British Medical Association on Tuesday last. The discussion was based on the resolution of the British Medical Association at its annual meeting in favour of legislation providing for the registration and education of medical, surgical, and obstetric nurses, and on the view that the first thing to be done was to ascertain the wishes of the nursing institutions on the subject. No doubt this is a thing to be done, but we should have been disposed to regard it as the last rather than the first. The first question is, What is the public want to be supplied? This question must be answered mainly by the medical profession, who know where and what kind of nursing is wanted, and what kind is not wanted. We are threatened with an army of nurses for which there is no corresponding demand. We have lately sounded a note of warning on this subject, and a similar note appears in the January number of our contemporary, the *Practitioner*. We observe that the very nursing associations themselves seem somewhat staggered at the grand schemes for raising them into a second edition of the medical profession. They have accepted by a majority of *one* a resolution to the effect "that a legal system for the registration of nurses was inexpedient in principle, injurious to the best interests of nurses, and of doubtful public benefit." Only the representatives of nursing institutions voted—6 for the resolution and 5 against. State registration accordingly was negatived. What is wanted is a class of women of helpful qualities, good temper, and moderate training to serve under medical men; and their cost must not be a bar to their services. There are indications abroad that we are returning to a common-sense view of the nursing question.

"A SAGITTA VOLANTE IN DIE."

DR. FLETCHER LITTLE, medical officer of health for Harrow, writes to the *Times* of Jan. 13th, and raises an important point. At the recently held conference of headmasters the report of the Royal Commission on Secondary Education was discussed, and Mr. Welldon, though welcoming the report, took exception to certain portions of it, notably that which provided for sanitary inspection of (presumably) boarding-houses by the local sanitary authorities. "Why," he said, "it would be in the power of the central office, upon a representation of the local authority, to close all boarding-houses—as undoubtedly it would close any school buildings—which did not satisfy the sanitary conditions prescribed by the central authority." Dr. Little points out—and we should have thought the fact would have been sufficiently obvious, even to Mr. Welldon—that there is a danger of intercommunication of disease between the boys and the townspeople and *vice versâ*, and that, the school being an integral part of the town, the residents in the town are interested in seeing that the sanitary inspection should be efficient. The simple fact is that houses and school buildings, if insanitary, should be not necessarily closed, but put in order, and this law holds good whether it is Mr. Welldon's house or any other person's. What the conditions existing at Harrow may be we know not, but we do know that at Eton in Mr. Welldon's time—whatever be the case now—the sanitary condition of some of the houses, to say nothing of the school buildings, was far from perfect. Certain of the class-rooms would have caused a School Board officer to faint. There were no means of ventilation, except draughts—no thermometers to mark the temperature, no proper seats, no hat-pegs, no means for disinfecting books, or any of the thousand and one luxuries to be found in a Board school. But then, of course, the parents of the boys paid for their education, or it was paid for by the beneficence of the pious founder and not taken out of the rates. We dare say the same thing exists at Harrow, and nowadays the Goths—if the sanitary authorities will pardon the expression—are at the gate. Scarlet fever is scarlet fever, whether in a duke or a dustman, and has to be fought in the same way. Mr. Welldon is a clever man; is a good scholar; is, we believe, a successful headmaster; and is—or was, at any rate—a most brilliant football player. But he had better hold his tongue than talk as he has been doing about sanitation.

THE annual general meeting of the Neurological Society of London was held on Thursday, Jan. 16th, at 8.30 P.M., at 20, Hanover-square. Dr. Hill, the President, delivered the inaugural address, entitled "Is there a Nerve Plexus?—a Criticism of the Results obtained by the Chrome-Silver Method of Staining Grey Matter," which was illustrated by photo-micrographs.

A PAPER will be read on Hospital Finance at the Victoria Hotel, at 4 P.M. on Monday next, Jan. 20th, by Colonel Montefiore, with special reference to the question of a central hospital board. Mr. Bryant will preside. Mr. T. Holmes, Dr. Acland, Dr. Glover, and others are expected to take part in the discussion.

MR. REGINALD HARRISON, senior Vice-President of the Royal College of Surgeons of England, has been elected a member of the council of the Royal Medical Benevolent College.

BRISTOL MEDICO-CHIRURGICAL SOCIETY.—The fourth meeting of the session was held on Jan. 8th in the medical wing of University College, Bristol, Mr. A. W. Prichard in the chair. Mr. John Dacre opened a discussion on the Uses of Alcohol from a Medical Standpoint; in a most interesting discourse he advocated the moderate use of alcohol both in health and disease. He was followed by Dr. E. L. Fox, Dr. Harrison, Mr. Munro Smith, Dr. Shingleton Smith, Dr. Skerritt, Mr. Cross, Dr. Prowse, Dr. Harvey, Mr. Greig Smith, Dr. Ewens, and Dr. Aust Lawrence; at a late hour Mr. Dacre reviewed the various points mentioned during the debate.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.—A meeting of this society was held on Jan. 1st, Dr. F. R. Mutch, President, in the chair. Dr. Bell Taylor read a paper on "Squint up to Date." He described the various methods of operating and thought that advancement without tenotomy was not usually successful; he advised operation in all degrees of strabismus. Dr. Mutch and Dr. Kingdon also spoke on the subject. Dr. Coulby moved, and Mr. Stephens seconded, the following resolution:—"That in the opinion of the society it is unprofessional and undignified for any medical man to accept the post of medical officer to so-called medical aid societies promoted by, and for the benefit of, men outside the medical profession." It was further moved by Mr. Lander, and seconded by Dr. Bolton, "That a committee of this society be elected to consider the best means of dealing with the subject of medical aid societies." Mr. Wood, Dr. Hunter, Mr. MacMillan, Dr. Tresidder, Mr. Pryce, Mr. Cox, Mr. Belcher, Mr. Anderson, Mr. Milner, Dr. Mutch, and Dr. Heelis spoke on the subject, and Dr. Coulby replied. Both resolutions were carried. It was then decided that the President, Mr. MacMil'an, Dr. Blurton, Mr. Cox, Dr. Hunter, Mr. Pryce, Mr. Lander, Dr. Coulby, Mr. Anderson, Dr. W. B. Ransom, and Dr. Tresidder should form the committee.

THOMAS WAKLEY,

THE FOUNDER OF "THE LANCET."

A BIOGRAPHY.[1]

CHAPTER III.

Life as a Student.—The Curriculum of the Royal College of Surgeons in 1817.—Fondness for Dissecting.—Great Dearth of Subjects.—Body-snatching and the Profession.

THOMAS WAKLEY was placed by Mr. Phelps in lodgings in a small street running off Tooley-street in the Borough. In this district it was the almost invariable custom for the students of the United Hospitals to lodge, because in those days there were not the facilities that now exist of getting from one metropolitan area to another, so that it was necessary for a man to live near his work. (We hardly realise how modern a thing the suburban resident is.) The exact street is not known by name to his surviving relatives, and is not traceable in any documents, but this much is certain, that it is pulled down, and that, like the ancient buildings of St. Thomas's Hospital, it stood upon ground now covered by the London Bridge Railway Station. There were some twelve small streets demolished in 1862 to make way for the necessary buildings of the railway company, and among them the street in which Thomas Wakley and a friend lodged. His fellow lodger's name was Thomas Wiltshire, and at that time there was no relationship between the two lads, but Wiltshire (who subsequently discontinued the pursuit of medicine) afterwards married the sister of Wakley's wife.

The young student worked hard. He had sufficient self-restraint to live a laborious life at a time when it was not only unusual for a "medico," as the comic press delighted to term him, to work very hard, but unnecessary, having regard to the perfunctory nature of the tests by examination. It is easy to understand that for the country-bred lad, with home influence strong upon him, the licentious Bohemianism to which we have alluded as being rife among the medical students of the metropolis would have no attraction. To him the coarse riots of the dissecting-room were only revolting; the orgy of porter, the Fleet-street amour, and the cutty of black tobacco, which played so large a part in the lighter side of student life, were not able to seduce him from his studies, for he cordially disliked each form of indulgence. He was abstemious by nature and cleanly by temperament, and to the end of his days cherished an unaffected and hearty dislike for the habit of smoking. His descriptions of his student days, as well as the testimony of one or two of his contemporaries, all go to show that he lived as a lad the life that he lived as a man—a life of self-respecting, sturdily independent, labour. The affectionate husband of five years later was no transmuted rake; and the man who, for thirty-five years of his life, regularly worked fifteen hours a day did not learn the self-denial and strength under perpetual strain necessary for such a career in the vagaries of a mis-spent youth. It was his affectionate habit to attribute to the influence of his favourite sister, Mrs. Newbury, the fact that the gins into which so many of his fellow-students blundered had no teeth wherein to catch him, but, in truth, all his after-life showed such an unequivocal contempt for sensual allurements that it must be believed that he was something of the innate Puritan. It must not be supposed, however, that he was in any sort of way a milksop or a prig. He was, on the contrary, a very muscular, energetic, and hearty young man, popular with his fellow-students and renowned among them for his physical strength and powers of endurance. He was a good and enthusiastic cricketer, a far better billiard-player than most lads of his age, and an adept at the old-fashioned game of quoits. Above all he was a brilliant boxer, and in those days the science of the gloves was more widely diffused than it is now, and it was possible for a man to get as much fighting as he desired—it was colloquially termed a "bellyful of fighting"—without going to the expense of subscribing to an elaborate gymnasium or taking out a course of instruction with a courteous *maître d'armes*. Many a public-house had attached to it in a half-loafing, half-business capacity a pugilist who, when not occupied in keeping order for his employer, the landlord, would oblige that employer's customers by putting on the gloves with them. The Game Chicken, the public character who was "to be heerd on at the bar of the Little Helephant," was a very real person at the date of Thomas Wakley's student life—more so, in fact, than forty years later, when Dickens drew him—and it was with such men that the young countryman would measure his strength, and from the instructions of such men that he derived his exceptional skill. His devotion to athletic exercise sufficiently redeems him from any charge of priggishness. He had to go for his fun where his fellow-students went for theirs—to public-houses and similar resorts, for not only did boxing and billiards take him into these places, but cricket and quoits necessitated sojourns at the same social centres; but his ideas of amusement, wherever he might find himself and in whatever company, were always hardy and innocent. In particular he loved the fierce give-and-take of fighting, and rejoiced—as any natural young man will always rejoice—in his prowess; and, if for no other reason than that he might always be in training for his chosen sport, he strictly abjured drink and tobacco.

In 1815 young Wakley was receiving an allowance of £80 a year from home, and the buying powers of £80 were considerably larger at that time than they are now. This was due to wants being fewer and simpler rather than to any item in the daily expenditure being cheaper. The cost of living—i.e., the bare cost of food—in London was not appreciably different then to what it is now, and the difference that existed compensated itself, one item being dearer while another was cheaper. Tea, sugar, and bread were, for instance, all considerably more costly, while beer and beef and butter were proportionately moderate. It was in the simplicity of their wants that the poor men at the beginning of this century found salvation. The medical student did not expect to have more than rough, scanty fare. He moved in a stratum of society where to be exceedingly poor was to be like everybody else, and where to be eccentrically shabby and unconventional in dress was to emulate the manners of the choicer spirits. Consequently no money had to be spent on keeping up appearances—a roof was wanted to sleep under, but there existed no necessity for the student to have more than one room; and a public cult of the beautiful was then a thing so far unknown that people vastly more rich and fastidious than medical students took no heed of the way in which their dwelling-places were furnished. Also, it must be remembered that much of the student's work of those days was done in the hospitals and the lecture-rooms of the private medical schools, for the curriculum of the College of Surgeons and that of the Apothecaries' Hall were such that much evening study could not be necessary. To share one room with a friend at a weekly rental of 8*s.* was the usual proceeding with the student of the United Hospitals, and the domestic arrangements of Thomas Wakley and Thomas Wiltshire, who had a bedroom each and a sitting-room to boot, must have savoured of lavishness in the Borough. Their meals they obtained out of doors at ordinaries, taverns, and cook-shops, and in this

[1] Chapters I. and II. were published in THE LANCET of Jan. 4th and 11th respectively.

respect there was not much difference between what they paid and what the clerk in London upon 30*s.* a week now pays. They would have found it difficult to spend less than 2*s.* a day; and, as a matter of fact, that sum exactly accounts for the expenditure of the whole of young Wakley's income, although we have it from himself that when he was a student he never knew what it was to want a sovereign. And he never once asked a penny from his father above his allowance, either to satisfy a creditor or gratify a taste, and if he had done so he would have taken nothing by the move, for Mr. Henry Wakley, being the arbitrary man that he was, in allowing his son £80 a year expected him to live upon it, and said so. Fees would not have been less than £20 per annum; his clothes would have cost him £10, for he was never unconventional in his attire, and even as a boy showed germs of the dandyism that later distinguished him; and the cost of his board and lodging swallowed the rest. Travelling was not a cause of expenditure at the beginning of the century upon which any watchful eye had to be kept, for the facilities for rapid locomotion were so small that all temptation to run backwards and forwards from town to country and from work to play was absent. There was also but one holiday in the medical year, and Thomas Wakley showed his sturdy muscularity, and perhaps the fact that he found the quietest living in the metropolis a strain on his exiguous resources, by walking all the way from London to Membury on each occasion. He was once accompanied on his walk by an elder brother, Michael, who was an accomplished pedestrian, but on another occasion he covered the whole distance in solitude.

The curriculum which was required of the student by the Royal College of Surgeons of England at that day and previously to 1823 looked vastly well on paper. The student was required to do five years' medical study, a fact that may come as a surprise to many who have been in the habit of regarding the extension of the curriculum in 1892 as a remarkably revolutionary and progressive step. During those five years the student was required to attend two courses of lectures and demonstrations upon anatomy at London, Dublin, Edinburgh, or Glasgow, and to take out two courses of practical dissection at a recognised anatomical school. To this was added a year's practice to be seen in the wards of a general hospital in one of the four cities. The candidate's lowest age was fixed at twenty-two. Thomas Wakley counted his five years dating from 1812, when he went as apprentice to his brother-in-law. He remained there nearly two years, going thence to Mr. Coulson, whom he assisted for more than one year. He qualified in 1817. From this distribution of his time will be seen the great importance that was placed at that day upon apprenticeship to a general practitioner. Out of a compulsory curriculum of five years it was open to the student to spend as much time as he liked as an apprentice, working under a qualified master. True, he was compelled to see one year's practice at a hospital, to attend certain lectures, and do a certain amount of dissecting, but inasmuch as he could attend the lectures and the practical courses of anatomy at the same time, while he was also seeing the practice of his hospital, his curriculum really meant one year's academic work to be added to four years' experience as assistant in a general practice. Thomas Wakley, coming to London in 1815, and attending at the United Hospitals and Grainger's School until 1817, gave a year's more time to the scientific side of his profession than could have been exacted from him and than was usual among those students, who, having no possible chance of hospital appointment, were looking to the public only for future advancement. But he spent over three years as an apprentice in the country. This is interesting to record because it shows that the man, the key-note of whose medical policy was the maintenance of the rights of the general practitioner, had obtained a practical insight into their wrongs by considerable experience of their lives and work.

He was exceedingly fond of dissecting, and is reported to have been a sound anatomist. We say "reported to have been," for his years in practice were few, and no actual cases have been handed down in whose treatment or diagnosis he betrayed any very special knowledge of the science, while the fact that he belonged to the rank and file of the profession and was not a fee-in-hand apprentice of a hospital surgeon precluded him from all opportunity, either in ward or lecture-room, of proving that he possessed exceptional knowledge. That he considered an intimate acquaintance with the machinery of the human body an absolute essential to all medical study is revealed over and over again in his writings in THE LANCET, in his words from the coroner's bench, and in his Parliamentary speeches; and this much is certain, that he spent an amount of time in the pursuit of anatomy which was not required of him by the schedule of the College of Surgeons. As we have seen, the minimum amount of dissecting required by the curriculum of the College was two courses. Wakley did three courses at St. Thomas's Hospital, and also a course at Grainger's private school, though he could but ill have spared the money necessary to buy "the parts," the expense of which was no slight consideration, as will be seen below.

To say that a knowledge of anatomy is the basis of all sound medicine and surgery is such a truism that to claim for Thomas Wakley that it was his idea must seem a little unnecessary, for if he had not possessed the idea he would stand convicted of shortsightedness. But it should be remembered that the science of anatomy was in those days not so easy of acquisition as it is now, that its professors were under considerable and unsavoury suspicion among the public, and that there was every temptation to belittle the study of the actual body. The dearth of bodies was at this time one of the most serious drawbacks to a medical education. Subjects for dissection could only be obtained from two sources. The first, the legitimate source, was the gallows, the corpses of murderers being handed over to the dissecting-rooms after the criminals had suffered capital punishment; the second, the illegitimate source, was the resurrection man. The inefficiency of the first source is shown by some figures which are given in an early number of THE LANCET.[2] From these it appears that the number of persons executed in England and Wales from 1805 to 1820, inclusive, amounted to 1150. It is known that not all these bodies were used for dissecting purposes, while the average number of students yearly entering upon their studies at the different London schools was estimated at nearly a thousand. And other legitimate sources—purchase, for instance—were not available. The law, only allowing the bodies of the worst malefactors known to it to be used for anatomical purposes, stamped an obloquy upon the dissector and also upon the dissected, so that it became an awkward task to attempt to acquire a corpse from its nearest surviving relatives, while it betokened a certain absence of delicacy in the relatives to allow themselves to be tempted by money to hand over the body. As a consequence the second, or illegitimate, mode of obtaining bodies was resorted to by the professors of anatomy at the different hospitals and the proprietors of the different private schools.

Body-snatching was practised largely and regarded by the medical profession not so much as an infringement of the law, and an outrage upon all decency, as a necessity, painful perhaps, but with its humorous side. It is narrated

[2] THE LANCET, vol. i., 1823, p. 66, third edition.

of a distinguished surgeon, the hero of many body-snatching stories, that on one occasion he went some way out of London to bring back a body that had been procured for him from a country churchyard where the watch against this form of desecration was not so alert as it was in London, and that on his return journey he propped up the body alongside of him in his gig, having clothed it in decent out-door garb, as the readiest method of getting it into his house without attracting any attention. Having stopped outside a suburban public-house for refreshment, the potman who brought out the liquor naturally inquired if the other gentleman wouldn't have anything. "Damn him, no," said the great surgeon coolly, recognising that he must account at once for the silence and immobility of his companion, "damn him, he's sulky." This is only one out of hundreds of stories for which very general credence is asked in proof of the fact that before the notorious murders by Burke and Hare and Bishop and Williams body-snatching was winked at in the medical profession. And it is not to be denied that this was the case. Can it be wondered at? A knowledge of anatomy was a necessity; this knowledge could only be properly obtained by dissecting, and, previously to the passing of the Anatomy Act, there were no bodies to dissect. The public at large looked upon body-snatching as contrary to all the established prejudices of humanity and did not care whether anatomy was studied or not,' overlooking its paramount importance to the medical man. The profession, on the other hand, had a conscientious desire to know all about the body they were going to treat, which desire could easily be strained into an intention to obtain the knowledge in spite of the public. These two attitudes were utterly irreconcilable, and, as is the case when people see things from different standpoints, a good deal of bitter feeling was occasioned. The students were compelled to depend for their acquisition of essential knowledge, in the dearth of proper subjects for dissection, upon expensive illustrated text-books and *papier-maché* models made for the most part in France. Sir Charles Bell's celebrated plates were published in 1798, and were the students' main support in Thomas Wakley's time, as Lizars's plates, probably the best thing of the sort ever published, were a decade later. The *papier-maché* models of the human figure were made in Paris and, to some extent, in Vienna, and were something like a child's picture puzzles in the use to which they were put. The student learned his topographical anatomy by their aid by fitting the parts in among each other in accordance with coloured diagrams and wax models. All this was felt to be, by those who knew, a very poor substitute for actual dissection of the body, and the profession were sorely troubled by the inability to obtain due facilities for learning. The apathy of the authorities did not allow of the utilising of the bodies of the unclaimed dead, and few persons were sufficiently free from prejudice to leave their bodies of their own free will to the anatomy schools. So that nothing was open to the anatomists save to get the bodies *aut vi aut fraude*.

In the end this lamentable state of affairs led to crime, but for years before the notorious Burke and Hare trial the pilfering of bodies from the churchyards was known to be undertaken at the instance of members of the profession, and for the offence many persons were convicted and heavily punished. Upon this it followed that the fees to be paid to the resurrection men grew heavier in proportion as the risk grew greater and the trade developed into skilled labour. A body was worth £10 to a professor of anatomy at a hospital, and even more to the owner of a private school, inasmuch as the hospital schools obtained such bodies as were at the disposal of the Government. A student had to pay in ready money as much as £2 or £2 10*s*. for "a part." So that it was only natural that the lucrative trade of body-snatching became almost a fine art, so necessary was it that the perpetrators of the sacrilege should avoid detection. Special tools were wanted: sharp curved spades on long handles, scoops on jointed shafts, grappling forceps, files, and light crowbars. The impression that nothing could be easier than to go to a churchyard and dig out a newly filled grave, break open the coffin, and make off with the unpleasant booty in a sack is erroneous. This might have been practicable where the earth was loosely piled in and very untidy, but a neatly finished grave would very soon give evidence if it had been tampered with. In the case of a neat or not quite new grave the ingenuity of the resurrectionist came into play. Several feet—fifteen or twenty—away from the head or foot of the grave he would remove a square of turf about eighteen or twenty inches in diameter. This he would carefully put by, and then commence to mine. Most pauper graves were of the same depth, and if the sepulchre was that of a person of importance the depth of the grave could be pretty well estimated by the nature of the soil thrown up. Taking a five-foot grave, the coffin lid would be about four feet from the surface. A rough slanting tunnel some five yards long would, therefore, have to be constructed so as to impinge exactly on the coffin head This being at last struck (no very simple task), the coffin wa lugged up by hooks to the surface, or, preferably, the end of the coffin was wrenched off with hooks while still in the shelter of the tunnel, and the scalp or feet of the corpse secured through the open end and the body pulled out, leaving the coffin almost intact and unmoved. The body once obtained, the narrow shaft was easily filled up and the sod of turf accurately replaced. The friends of the deceased, seeing that the earth *over* his grave was not disturbed, would flatter themselves that the body had escaped the resurrectionist; but they seldom noticed the neatly placed square of turf some feet away. The amount of empty coffins that have been discovered in the operations of sextons and in the course of the reclamation of graveyards proves beyond a doubt that at this time body-snatching was frequent; while the fact that the medical profession was the only class of the community benefiting by the felonies suggests the probability that it stood in the position of instigator. Facts cannot be escaped from, while comment is uncalled for. The hirer of the body-snatcher could be condemned in a stream of sentiment or defended in a column of casuistry, but either would be out of place here.

We have now brought the record of Thomas Wakley up to the end of his student days. In October, 1817, he passed his examination for the Membership of the Royal College of Surgeons of England, and walked home to Membury to announce the news.

(To be continued.)

GLASGOW UNIVERSITY.

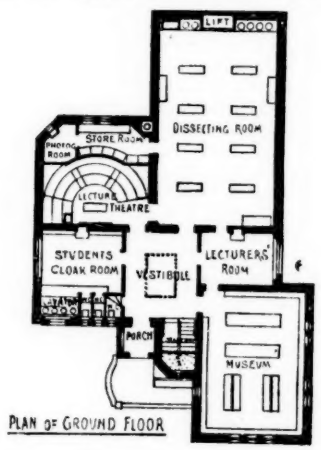
QUEEN MARGARET COLLEGE.

ON Monday, Nov. 18th, 1895, a new anatomical department for the women students of the university was opened by the Principal. It was given to the university by the Bellahouston Trustees, who were present on the occasion. A large number of the Senate and the special staff of the women's department attended, as well as a number of the teachers in the other medical schools of the city.

Principal Caird, in declaring the building open, said:—"I do not intend to trouble you with anything of the nature of a formal speech, but it would not be right to let the occasion pass without offering our thanks to the Bellahouston Trustees, by whose munificence the university has been enabled to erect this building, and also our congratulations to the teaching staff of Queen Margaret Medical School, and especially to Professor McKendrick and Dr. Bryce, on the admirable provision that has now been made

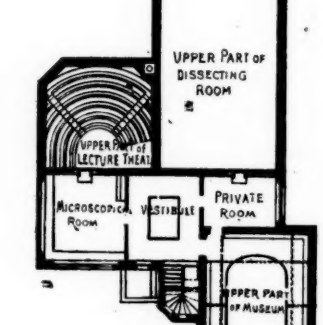
for its anatomical and physiological department. I cannot speak, of course, from the point of view of an expert, but, leaving details of its accommodation and equipment to Dr. Bryce, to whose indefatigable labours we are greatly indebted for designing and superintending the erection of this building, I will only say that I believe all competent judges would pronounce that it is admirably adapted for the purpose for which it is intended, and that it forms a fitting complement to the main building, for the possession and equipment of which we are indebted to the splendid liberality of Mrs. Elder and to the generous and indefatigable labours of Mrs. Campbell. Let me only add that the history of Queen Margaret College, and especially of its medical school, has been one of great and growing prosperity. It began with 13 students, and has now, at the beginning of its sixth year, 67 in attendance. The numbers in the successive years have been as follows: 1890–91, 13 students; 1891–92, 27; 1892–93, 48; 1893–94, 50; 1894–95, 54; and 1895–96, 67. The total number of students in the college during the same years, including the above medical students, was: 1890–91, 194; 1891–92, 201; 1892–93, 146; 1893–94, 156; 1894–95, 200; and 1895–96, 232. In the first two years the students had only the examinations for the triple qualification of the Scotch colleges open to them; but when in 1892 the degrees of the Scottish universities were opened to women, and Queen Margaret College became part of the University of Glasgow, most of the students already in the school of medicine took their examinations over again in the university to qualify themselves for the degree; and all students who have joined it since then, with only one exception, are working for the degree. The facilities for teaching medicine in Queen Margaret College have been good from the first in some of the subjects—e.g., in physics and chemistry—a new chemical laboratory having been constructed in 1888 under the superintendence of Dr. G. G. Henderson, now professor of chemistry in the Glasgow and West of England Technical College. And the clinical and dispensary training to which the students have access is ample, including, as it does, several wards in the Royal Infirmary, and admission to the Royal Hospital for Sick Children, Royal Asylum for Mental Diseases (Gartnavel), Glasgow Maternity Hospital (West-end branch, St. Vincent-street), Eye Hospital (Charlotte-street), and Fever Hospital (Belvidere). But with regard to anatomy the teaching has had to struggle against considerable difficulties, the only rooms in the college which it was possible to devote to that subject being too small, too low in the roof, and somewhat defective as to light. They were only, however, considered as a temporary substitute for the more suitable and spacious laboratories which it was hoped might be looked forward to when funds could be obtained for building them. This hope has now been fully realised by the gift of the Bellahouston Trustees. I think you will agree with me that these facts are most cheering and encouraging to all who are interested in the success of our medical school."

Dr. Bryce, the lecturer on anatomy, expressed on behalf of himself and his students the thanks due to the University Court and to the Bellahouston Trustees for the grant for the new laboratories, stating that if the trustees appreciated the great advantage to the work during their three years of anatomical study they would feel that no grant yet given conferred a more necessary boon. After referring to his indebtedness to Professor Thomson of Oxford, whose model anatomical department he and Mr. Keppie were permitted to examine, he proceeded to describe the building. He said that its main feature was its compactness. Architectural features had not been obtained by any sacrifice of utility, and yet interest had been maintained by an exceptionally simple and frank treatment of structural detail. The central part alone was two storeys high; the rest of the building was of equal height, all lighted from the roof. The whole building was heated by hot pipes and radiators, and the ventilation was very simply managed by apertures opening into a chamber within the chimney stalk surrounding the iron furnace flue. From the entrance hall, which was approximately twenty feet square, opened on the left the students' cloak-room, fitted with lavatory accommodation, a screen for their cloaks and dresses, and lockers for their tools and books. He referred to a feature which characterised the building throughout, and which made it unique among its kind—viz., the simplicity, but variety and artistic quality, of the detail. From the north wall of the hall opened the lecture theatre and dissecting-room. The theatre was about twenty-five feet square and seated for about 100. It was lighted by a large single north window, from which the light was focussed on the area, black board, and diagram screens. The whole north wall was plastered with a cement, giving a smooth white surface, on to which the lecturer could project his lantern pictures. The theatre was placed parallel with the dissecting-room, with a door between the two, and the arrangement allowed them to utilise the space below the seats for a private work-room opening from the dissecting-room, and a dark room for photography. The room was fitted with an apparatus for making lantern slides and with an incubator for supplying chick embryos for the class of



PLAN OF GROUND FLOOR

embryology. The dissecting-room was 48 ft. by 28 ft., and lighted from the north by three ranges of windows arranged like a modern factory roof. He considered the light almost perfect for the purposes of the room. The walls had a dado of white tiles, above which a black board ran right round the room. The remainder of the wall was of adamant plaster. At the north end were a range of basins, a special kind of sink, and a lift from the basement. The floor here, as throughout the rest of the building, was of oak, in narrow planks, closely fitted. From the east wall of the entrance hall the museum



PLAN OF UPPER FLOOR

and lecturer's room opened. The museum was 33 ft. long, 24 ft. broad, and 38 ft. high, and had a gallery opening from the gallery of the vestibule. The disadvantage, in most museums with galleries, of the darkening of the walls beneath was avoided by having side and end lights above the level of the glass cases. Between the museum and dissecting-room was the lecturer's room, opening into both, and fitted for the lecturer's private microscopic work with every contrivance for modern microscopic science. Upstairs over this

room was a similar apartment for research work opening from the gallery of the vestibule and also from the museum gallery; while on the opposite side of the vestibule was a microscopic room, measuring 20 ft. square, with windows round two sides, for microscopic demonstrations and the regular meetings of the histology class. This room had been fitted up under Professor McKendrick's instructions, for though the building had been designed wholly for anatomy, it had been arranged to utilise this room also for the histology class. In the basement there was a capital workshop for the attendant, stores, preparation-room, &c., and the furnace-room for the boilers of the heating apparatus and for the hot-water system. He concluded by saying that he thought that when they had inspected the building they would admit that it formed a very compact and perfect anatomical department and a very satisfactory addition to the university laboratories.

THE FOLK-LORE OF GOUT.

WE have received from Mr. J. F. Thiselton Dyer, whose name is well-known in connexion with works on Folk-lore and kindred subjects, the following interesting little essay on gout from what may be termed the lay and chatty point of view. Although the communication has of course no medical bearing it will be found none the less interesting to medical men:—

Many years ago one Misausus wrote a curious little book in honour of the gout, with the object of proving that it was a blessing for which mankind could not be too thankful, arguing that if Paracelsus could make men proof against death his secret consisted in inoculating them with gout. But when it was suggested that gouty people do die he humorously replied that men know not when they are well off, but must needs be curing the gout and therefore deal with death's factor, the physician. It was, however, a popular notion that gout lengthened life, and statistics at the present day show that it is not answerable for more than one death in every 1700. Despite, too, the many amusing caricatures of which gout has, from time to time, been made the subject, it was generally supposed that this disease allowed no other to monopolise its place, reminding us of the remark of Posthumus in "Cymbeline," who says:—

> "Yet am I better
> Than one that's sick of the gout; since he had rather
> Groan so in perpetuity than be cur'd
> By the sure physician, death, who is the key
> To unbar these locks."

For a long time, again, gout had the reputation of being pre-eminently the rich man's disease, and Sydenham, who, it may be remembered, was the first man minutely to study the disease, remarked that, unlike any other complaint, "it kills more rich than poor, more wise than simple. Great kings, emperors, generals, admirals, and philosophers have died of gout." A rich man without gout is one of Rosalind's examples of whom time ambles withal; and it is told of an old Scottish gentlewoman that she would never allow that any but people of family could have *bonâ-fide* gout. If it was mentioned that a *roturier* was afflicted with that disease she would shake her head: "Na, na; its only my father and Lord Gallowa' that has the regular gout." Lord Burleigh, like many other statesmen, was subject to gout, on which account Queen Elizabeth always made him sit in her presence, and was wont to say: "My lord, we make much of you, not for your bad legs, but for your good head." In one of Pitt's last letters to the Marquess Wellesley he alludes to his slow recovery from severe attacks of gout, and both the Earl of Chatham and Fox were afflicted by it. Horace Walpole was another victim, and after comically describing himself as wrapped in flannels, like the picture of a Morocco ambassador, he says: "If either my father or mother had had it, I should not dislike it so much. I am herald enough to approve it if descended genealogically, but it is an absolute upstart in me, and, what is more provoking, I had trusted to my great abstinence for keeping me from it; but thus it is." Sydney Smith, when writing to the Countess of Carlisle in his seventy-first year, speaks of his 'gout and humorously writes: "What a very singular disease it is! It seems as if the stomach fell down into the feet. The smallest deviation from right diet is immediately punished by limping and lameness, and the innocent ankle and blameless instep are tortured for the vices of the nobler organs." The Scotch formerly regarded the gout as a fit punishment for the luxurious living of the English, but, as it has been pointed out, this *morale* is spoilt by the gout existing among the poor and temperate Faroë Islanders. It is not confined to any one class, and has afflicted some of the ablest men in all ages; although, strange to say, it is five times more frequent in men than in women. Among some of the literary men and poets who suffered from gout may be mentioned Fielding, Newton, Linnæus, Milton, Congreve, and Dryden; and of warriors included among its victims Lord Howe, Marshal Saxe, Wallenstein, and Condé. Although Dr. Cullen was strongly of opinion that all gout must be considered hereditary, modern science has somewhat qualified this assertion, maintaining that three out of every five cases may be regarded as inherited. But, as it has been recently observed, although "the taint may be hereditary, it may be generated by a low diet and abstinence carried to extremes." It is worthy of note, also, that where there is a predisposition for gout a fit may be induced by the most opposite causes; and, whereas Kingsley's "North-East Wind" will excite it in some instances, a mathematical problem has been known to produce it in another. On the other hand, it seems incredible that anyone should desire gout, and yet it is said that Archbishop Sheldon not only wished for it, but actually offered as much as £1000 to any person who would keep him to it; for he looked upon gout as "the only remedy for the distress in his head."

The many strange remedies propounded, at one time or another, for the relief of gout form an interesting chapter in the history of folk-medicine. Thus Harvey, it appears, was a great martyr to gout, and his mode of treating it was the following. He would sit with his legs bare, even in the coldest weather, on the leads of Cockaine House, and put them in a pail of water until he was almost dead with cold. And it may be remembered that Queen Caroline, the wife of George II., made use of a similar remedy. Culpeper, who was a student of astrology as well as of physic, recommends against the gout this cure: "Take an owl, pull off her feathers, and pull out her guts; salt her well for a week, then put her into a pot and stop it close, and put her into an oven, that so she may be brought into a mummy, which, being beat into powder and mixed with boar's grease, is an excellent remedy for gout, anointing the grieved place by the fire." An old German recipe, which in days past was in high repute in this country, was to take hold of an oak, or of a young shoot already felled, and to repeat these words:—

> "Oak-shoot, I to thee complain,
> All the torturing gout plagues me;
> I cannot go for it,
> Thou canst stand it;
> The first bird that flies above thee,
> To him give it in his flight,
> Let him take it with him in the air."

And when Lord Burleigh was laid up with the gout the Archbishop of Armagh besought him to prove the efficacy of a remedy he had brought with him from Holland, and which was thus: "Take two spaniel whelps of two days old, scald them, and cause the entrails to be taken out, but do not wash them. Take four ounces brimstone, four ounces turpentine, one ounce spermaceti, a handful of nettles, and a quantity of oil of balm, and put all the aforesaid in them stamped, and serve them up, and roast them, and take the drops, and anoint you where your grief is." Cardinal Zinzendorff, as a remedy for the gout, was accustomed to bathe his legs every morning in pig's blood; and Horace Walpole, in one of his letters, says that Mademoiselle de Bonzoli, Marshal Berwick's daughter, assured him at Paris that there was nothing so good for the gout "as to preserve the parings of his nails in a bottle, close-stopped." Another friend recommended him to cut his nails in hot water, but, he adds, "next to my bootikens I ascribe much credit to a diet drink of dock roots." Then, again, Laud, writing to Strafford, says: "I have heard of them that have gone up and down in the dew in their shoes to cure themselves of the gout. Methinks you should try this experiment, rather than lie bedridden as you do." And another old-fashioned remedy consisted in wearing constantly a piece of loadstone in a little flannel bag suspended from a black ribbon round the neck. Hone tells an amusing case of a mad bull giving chase to a gouty old gentleman and frightening his malady away for ever. Among the numerous other

odd remedies employed for the relief of gout may be mentioned the use of honey from the linden-tree. The Russian peasantry restrict the bees to a period of three days, as they affirm that by this time the valuable saccharine matter is most commonly exhausted, and they assert that it possesses this great property—that no one who drinks it is ever troubled with the gout; and it may be noted that in our own country districts various plants, such as the winter cherry, horse-radish, crane's-bill, herb-gerard, and strawberry, have long been held in high repute among the peasantry as specifics for gout.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.

A QUARTERLY meeting of the council was held on the 9th inst., the President, Mr. Christopher Heath, being in the chair.

It was decided that the revised Dermatological Catalogue should be issued at 4*s.* per copy.

A report, dated Dec. 16th, from the Committee of Management, was read, and was approved and adopted. It was to the following effect:—

1. That the Bancroft School, Woodford, Essex, be added to the list of recognised places of instruction in chemistry, physics, and practical chemistry and biology. 2. That the West London Hospital be recognised as a place of study during the fifth year of the curriculum. 3. That the Royal London Ophthalmic Hospital, Moorfields, be added to the list of ophthalmic hospitals recognised by the Board. 4. That the examination in elementary physiology, applicable only to candidates under the four years' curriculum, which has hitherto been conducted by papers and written answers, be for the future conducted *viva voce*.

A report, dated Dec. 6th, from the Laboratories Committee, was approved and adopted; it was as follows:—

The work in Diphtheria for the Metropolitan Asylums Board.—(*a*) Examination of Material for Diagnosis. Since Oct. 4th, 2415 specimens have been examined and reported upon. The average number of specimens examined per diem has been thirty-four. During the year 10,374 cases have been examined, giving an average of 35·6 per diem. (*b*) The Preparation of Antitoxin Serum. Since Oct. 5th the director has supplied about 2075 doses of antitoxin serum for the treatment of diphtheria in the hospitals of the Metropolitan Asylums Board, and all the demands have been fully met. Six horses are being used, and three others are being prepared.

Mr. Bryant, on behalf of Miss Baillie, presented to the College some further letters of John Hunter, Edward Jenner, and other persons of note. The council voted their best thanks to Miss Baillie for her gift.

The President reported the proceedings at the half-yearly meeting of Fellows on the 2nd inst. The two resolutions passed at that meeting were read. The first, which stated that it was desirable to give to Members of the College direct representation upon the council, was referred to the Deputation Committee, to consider in connexion with the subjects already submitted to them. The second resolution, approving of the admission of women to the diplomas of the College, was not proceeded with.

The Senior Vice-President reported that the President, Mr. Christopher Heath, had consented to deliver the next Hunterian Oration, and accordingly declared Mr. Heath to be appointed Hunterian Orator for 1897.

A letter was read from the Civil Rights Defence Committee enclosing copies of memorials to be presented to Members of Parliament, inviting their support in the work of the committee, and asking for signatures. Several members of the council signed.

BRITISH MEDICAL BENEVOLENT FUND.

THE annual general meeting of subscribers to this fund was held on Tuesday, Jan. 14th, at the residence of the treasurer. The chair was taken by Mr. J. T. Mould, F.R.C.S., Vice-President, in the absence of Sir James Paget, Bart., President, unavoidably prevented from presiding. Amongst the subscribers present were Dr. Sidney Phillips, Dr. Bright, Dr. Baines, Dr. Felce, Dr. Bowles, Dr. Holman and Dr. Lowe, and Mr. Parker, Mr. Young, Mr. Page, Mr. Kiallmark, Mr. Roche, Mr. Lynch, Mr. Byam, Mr. Morgan, and Mr. Howard Marsh; the treasurer, Sir William Broadbent, Bart.; and the honorary secretaries, Dr. Samuel West (finance) and Mr. Edward East (cases). The financial statement was submitted and the report of the committee read, and from them it appeared that subscriptions, £991 8*s.*, and donations, £700 18*s.* 8*d.*, together £1692 3*s.* 8*d.*, had been received, the income from investments amounting to £2333. £1548 had been distributed in grants, and 107 annuitants had received £2114 6*s.* 8*d.* The distribution had been effected mainly through the agency of the Cheque Bank in monthly instalments, a mode found by the committee to be exceedingly advantageous. Eighteen annuitants had been elected to supply vacancies caused by death, and grants had been made to 158 applicants, the total number of applications received being 212. Three legacies had been received during the year—viz., £500 from the estate of the late Mr. T. M. Stone, £45 from that of Miss Wallace, and £300 from that of the late Miss Brigstocke. During the year the trustees had asked to be relieved from the responsibility they had borne so long, and had resigned their office. Their resignation had been received by the committee with regret and an expression of thanks for their services in that capacity. Sir William Broadbent, Mr. John H. Morgan, and Dr. Samuel West had accepted office in their place. Several changes in the useful office of hon. local secretary had taken place. Dr. Markham Skerritt had been succeeded by Dr. Michell Clarke at Bristol, and Dr. Duncan succeeded Dr. Miller at Dundee; new secretaries had been appointed for Tottenham, Hampstead, and Kilburn—viz., Dr. G. A. Watson, Mr. J. W. Pilcher, and Dr. T. Morton; and Mrs. E. E. Palmer had accepted the post of lady collector for Norwich. Dr. Baxter Forman, Dr. Marmaduke Prickett, and Mr. Edward East joined the committee, and Sir Henry Acland, Sir Edward Sieveking, and Mr. Herbert Page were appointed vice-presidents. Mr. Edward East resigned his appointment as secretary for cases and received the thanks of the meeting for his long services; he is succeeded by Mr. Joseph White, 6, Southwell-gardens, S.W. Votes of thanks were passed by acclamation to the treasurer, secretaries, auditors, and to the medical press, and Mr. Mould was thanked for his services to the fund and conduct in the chair.

THE MIDWIVES QUESTION AND THE LANCASHIRE AND CHESHIRE BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

THE following is the last utterance of the special committee of the Lancashire and Cheshire Branch of the British Medical Association in connexion with legislation for the registration of so-called midwives. It is in the form of an appendix to a report of the committee received *nem. con.* at its meeting on Jan. 8th, 1896.

APPENDIX.

The prolonged and careful consideration which your committee has given to the midwives question warrants the belief that a short *résumé* of the conclusions arrived at would be acceptable to the Branch.

Your committee is convinced:—

I. That the existing state of things is not satisfactory.

II. That there does exist a large class of persons too poor to pay ordinary medical fees, too proud to ask for medical relief through the existing machinery of the Poor-laws, and who consider that the skill of those members of our profession who have lowered their remuneration to an extent which is degrading our calling in the eyes of the public is no higher in comparison with that of others than is their fee or ethical position.

III. That the continuance of this state of things constitutes a grave imperfection in our system and leaves a distinct opening for the pseudo-philanthropist—ever ready to pose as a "public benefactor."

IV. That the Midwives Registration Bills hitherto promoted are essentially bad in principle, and, even were they practicable schemes, would not remedy the above-mentioned defects.

V. Your Committee think the following suggestions for effecting an improvement in the present unsatisfactory condition of things worthy of the serious and careful attention of the branch:—

A. That an easy and ready method of effecting such improvements consists in a slight modification of the machinery by which Poor-law "medical relief" is administered, on the following lines:—

(1) That orders for such relief should be available from some source other than the relieving officer.

(2) That a much larger number of "district medical officers" be authorised to receive such orders.

(3) That in emergency cases and midwifery a person should be able to apply to any registered medical practitioner in the district, who would secure his fee from the parochial authority.

B. A measure for the protection of pregnant and lying-in women and newly-born children, by promoting the better training of women as midwifery nurses, and their compulsory registration as such; thereby placing them under efficient medical control, thus obviating the mischievous practices of the present uncontrolled certified or diplomated "midwife," and the dangers of unskilled attendance.

C. A system whereby competent nurses could be made available to carry out the instructions of the medical attendant (after the plan of the "district nurses" at present in vogue in many places)—thereby bringing the poor who require aid during midwifery attendance in line with those requiring surgical or medical aid.

Your committee believes that such improvements would at once do away with the asserted necessity for a so-called "midwife," and, with her, a vast amount of crime and suffering.

THE CASE OF MR. LIONEL SMITH.

WE publish a second list of contributions to this most deserving fund, and beg again to urge the hardship of Mr. Smith's case upon the attention of our readers. He has engaged to leave England in a fortnight's time to take a small post under Government in Zululand. He is an absolutely ruined man through no fault of his own, and he has charges upon him that make it very difficult for him to leave England and begin an official career again until they are settled. The following contributions additional to those published in THE LANCET of Jan. 4th have been received by us:—

Amount previously acknowledged ...	£48	8	0
A. O.	1	0	0
Dr. F. H. Champneys	2	2	0
Dr. A. Findlater	1	1	0
Mr. W. G. Groves	2	2	0
Mr. W. H. Hubert...	0	10	0
Scholastic, Clerical, and Medical Association, Limited	1	1	0
Dr. R. C. Shettle	1	1	0
Dr. Henry Sutherland	1	1	0

The following sums have been received by Dr. F. de Havilland Hall:—

The Medical Defence Union	£10	10	0
Dr. Goodhart	10	0	0
Mr. Thos. Smith	3	3	0
Dr. Philip Frant	5	5	0

Additional contributions may be sent to THE LANCET Office, cheques and P.O.O.'s being made payable to the "Lionel Smith Fund."

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF INSPECTORS OF THE MEDICAL DEPARTMENT OF THE LOCAL GOVERNMENT BOARD.

Report upon the Sanitary Condition of the Administrative County of Bedford for the Year 1894, by LEONARD WILDE, M.D., M.R.C.P., D.P.H.—In this report, which is based upon the annual reports of the local medical officers of health, Dr. Wilde points out that as regards the general sanitary condition of the county the most frequent and noticeable deficiencies remain pretty much the same as those dwelt upon in the previous year—viz., unwholesome water-supplies, especially in the rural districts, pollution of streams and roadside ditches, the absence of system in the removal of refuse and disposal of excreta, and the lack of infectious hospital accommodation and public disinfection. The population of the various sanitary districts reporting to the County Council in 1894 is estimated by the medical officers of health as follows: urban sanitary districts, 79,750; rural sanitary districts, 103,199. The birth-rate in urban districts was 27·2; in rural districts 26·6 as against 29·6 for England and Wales, the highest birth-rate per 1000 living being recorded in the Luton urban and the Wellingborough rural districts. The death-rate per 1000 of population was for the urban districts 14·1, in the rural 14·6, as against 16·6 for England and Wales, the highest death-rate, 18·6 per 1000, being reached in the Eaton Bray rural district, and the lowest, 11·4, in the borough of Bedford. In those districts where it has been possible to institute a comparison with the returns of previous years there appears to have been a remarkable decline both in the general and special death-rates. The relative infantile mortality per 1000 births was in the urban districts 126 and in the rural 118, which, although lower than the same rate for England and Wales, does not show, as Dr. Wilde notes, any appreciable diminution upon previous years. The zymotic death-rate was in the urban districts 1·4 and in the rural districts 1·3, as against 1·76 for England and Wales. Two cases of small-pox were notified during the year. Both occurred at Bedford and illustrated very clearly how the disease may be spread by tramps. Owing to the delay in publishing the report of the Royal Commission on Vaccination, Dr. Wilde points out that in certain districts of the county vaccination is rapidly becoming voluntary. Indeed, the half-yearly returns made to the Wellingborough board of guardians on Aug. 14th, 1895, showed that with 708 births in the union only 4 children had been vaccinated! Taking the whole county of Bedford, only 37·5 per cent. of children born are accounted for in the vaccination returns. There has been a decided diminution in the prevalence of scarlet fever during the year, only 24 cases having been reported—8 in the urban and 16 in the rural districts. On the other hand, 37 deaths occurred from diphtheria, 13 in the urban and 24 in the rural districts, the disease assuming epidemic proportions in the Biggleswade and Woburn rural districts. Eleven deaths occurred from enteric fever, of which 4 belonged to the urban and 7 to the rural districts. Of the latter 4 were in the Wellingborough union, now outside the county, a district in which the medical officer of health has strongly condemned the water-supply. Whooping-cough was responsible for 80 deaths and measles for 55. The prevalence of the latter during the year was a great deal above the average and necessitated the closure of schools in several districts, owing to extensive epidemics having broken out. No case of cholera or choleraic diarrhœa was notified in the county. The death-rate for the county from phthisis was 1·1 per 1000, for the urban districts 1·4 and for the rural districts 0·9. Notwithstanding the advisability of adopting the Infectious Disease Notification Act, half the urban districts and two of the rural districts still neglect to do so, although the medical officers of health of these districts are all strongly in favour of the Act. Dr. Wilde also strongly urges the adoption of the Infectious Disease Prevention Act in the county. Although the important subject of the provision of hospital accommodation for the isolation of infectious disease has received a good deal of attention, he is unable to report any practical outcome as a result, six districts having still no hospitals at all, and one but temporary accommodation for one kind of disease. In most of the hospitals in the county a charge is made for the maintenance of patients, but naturally in the case of the very poor this charge is waived and the burden thrown on the ratepayers. Dr. Wilde is of opinion that, except for patients residing outside the district and making use of hospitals within the county, to exact a charge is a very undesirable procedure. The condition of disinfection within the county appears to be in a still more backward state than isolation, for beyond fumigating and cleansing infected houses disinfection of clothes by steam is not undertaken by a single local authority. As regards water-supply, many of the districts are dependent on wells entirely, which in too many instances are surrounded by pig-styes, middens, &c., and frequently inadequately guarded from surface percolation. In the case of Leighton Buzzard urban and Wellingborough rural districts the medical officers point out that the streams are contaminated by sewage pollution. In most of the towns and villages Dr. Wilde is of opinion that the removal and disposal of sewage are in a most unsatisfactory condition.

Report of the Sanitary Condition of the City of London for 1894, by W. SEDGWICK SAUNDERS, M.D., F.S.A.—In submitting his annual report for 1894 to the Commissioners of Sewers Dr. Sedgwick Saunders is able to state that the general health of the City is good, no epidemics having prevailed during the year, while the sanitary condition of the houses and streets has been maintained at a high level of excellence. The estimated *night* population for the City at the end of June, 1894, was 34,831, being a decrease

of 3489 since 1891; and, assuming that the same rate of diminution will go on till 1901, the population at that date may be estimated at 28,357. The estimated *day* population for June, 1894, was 315,400, an increase of 14,016 upon that of 1891, and giving a density of day population of approximately 469 per acre as against the thirty-three chief cities and boroughs, which average 34·9 per acre. Calculated upon the night population, the density would be only 51·8 persons per acre. Of persons belonging to the City 600 died during the year, of whom no less than 10·5 per cent. died from injuries and violence, a large proportion of these including persons found drowned in the Thames, whose deaths, their residences being unknown, were registered as occurring in the City. Many newly born infants were found concealed in railway carriages, cloak-rooms in stations, dustbins, and other places. The death-rate for the City in 1894 was 17·2 per 1000, as against 17·4 for the whole of the metropolis. The deaths of children under one year of age to 1000 births were 157, against 143 for the whole of London. The birth-rate was only 14·9 per 1000, being the lowest in the metropolis. Of the 520 infants born in the City, 410 were successfully vaccinated, 2 were insusceptible, 44 died before the age for vaccination, 17 were postponed by medical certificate, 42 removed to other districts and were lost sight of, and 5 were still pending at the end of the year. During the year a number of adults were revaccinated. Of deaths from zymotic diseases, including those which occurred in public institutions within the district, 5 were from scarlet fever, 31 from diphtheria, 23 from enteric fever, 4 from erysipelas, 3 from measles, and 12 from whooping-cough. There were no deaths from small-pox. Out of the total number of cases reported 65·6 per cent. were removed to hospital, while of scarlet fever and diphtheria cases no less than 86·8 per cent. of each were removed. Dr. Sedgwick Saunders bears strong testimony to the promptitude and thoroughness with which the ambulance service of the Metropolitan Asylums Board is carried out. In a population of 1066 inhabiting the artisans' dwellings in Houndsditch, and composed of 53·5 per cent. of adults and 46·5 per cent. of children, the death-rate was 14·1 per 1000 per annum, of which 60 per cent. was apportioned to children under five years of age. The birth-rate was 44·1 per 1000, and the zymotic death-rate 2·81 per 1000, as against 0·72 in the City and 2·6 for the metropolis. The Commissioners of Sewers have, after much labour and inquiry on the part of their sanitary committee, secured a commodious building at 6, Cotton-street, Aldersgate-street, at a rental of £275, which has been adapted for the combined purpose of an office for the sanitary inspectors and a shelter for persons temporarily dispossessed of their houses during disinfection after infectious disease. The place was opened on Jan. 25th, 1894, and since then 77 persons have received temporary accommodation in the house. Dr. Sedgwick Saunders notes the steady increase in the use of electricity in the City, there being now nearly 3000 private consumers of electricity, employing 136,000 incandescent lamps, while 483 electric lamps are placed in the principal streets, necessitating the removal of 1338 gas lamps. By extended use of the "skip system" for the removal of refuse from houses it has been possible to clear away a large number of public dustbins from courts and alleys, and thus to obviate a constant source of complaint and annoyance. The refuse is treated in a destructor apparatus at Letts's Wharf, but the result of its working has not been so satisfactory as in other cities, due, Dr. Sedgwick Saunders believes, to the small quantity of carbonaceous matter left in London dustbins and the large quantity of straw and packing material collected from markets and warehouses, which check rather than encourage the free combustion necessary for obtaining the full advantage of cremation. During the year 1401 premises were inspected, necessitating 9998 visits. At 936 places grave sanitary defects were detected, rendering it imperative in many cases to insist on a completely new system of drainage being laid down, as, for instance, at Christ's Hospital and other important places. To remove foul emanations from sewers arising from ventilators in roadways shafts have been erected, wherever possible, in front of adjacent buildings where no objections were raised by owners. In many streets a systematic house-to-house inspection has been carried on, with the result that several houses have been condemned as permanently unwholesome and unfit for human habitation, and have been accordingly either closed or demolished. During 1894 about 340,956 tons of meat were received at the Smithfield markets, including 35,050 tons of general foreign and meat produce, 71,638 tons American-killed fresh meat, and 49,908 tons Australian and New Zealand-killed fresh meat. Dr. Sedgwick Saunders notes that, while the Australian and New Zealand trade has increased only $3\frac{8}{9}$ per cent. during the year, the American has increased 26 per cent. Of the total amount of meat received $\frac{1}{8}$ per cent. was seized, condemned, and destroyed as unfit for human food. The treatment adopted for rendering meat unfit for consumption is first to slash it and then immerse it in a bath of chlorides of sodium and calcium, sulphate of iron, picric acid, and water. During 1894 there were delivered at Billingsgate-market 128,361 tons of fish, of which the inspectors of the Fishmongers' Company seized and destroyed 1220 tons as being unfit for human food, the whole of the expenses of this work being borne by the Company. In consequence of some sensational articles in the public press depicting the horrors of the only two common lodging-houses in the City, Dr. Sedgwick Saunders personally inspected both. He found them, with the exception of the kitchens and lavatories, in fairly good order, and by no means in such a deplorable condition as described. He could not recommend any method of improving the defective portions short of demolition and reconstruction. In his capacity of Public Analyst, Dr. Sedgwick Saunders analysed 161 articles during 1894, exclusively of frequent examinations of the City water-supply, and of chemicals required for the manufacture of disinfectants. In no case was it deemed necessary to institute a prosecution, although in some instances the articles came perilously near adulteration, this being especially noticeable in samples of milk. The examination of the water from time to time showed its standard of purity to be satisfactory.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Stockport Urban Sanitary District.—During 1894 the general death-rate of Stockport was but 18·7 per 1000, a rate which is 4 below any previously recorded for that district, and as much as 6·7 per 1000 below the corrected average death-rate for the decennium 1884–93; the lessened mortality for 1894 was, Dr. Charles Porter tells us, mainly due to the diminished mortality from zymotic diseases. In connexion with the mortality statistics Dr. Porter has drawn up an instructive table showing the death-rate for each of the years 1891–94, inclusive, for each age group of the population, differentiating males from females. The infantile mortality for 1894 was no less than 192 per 1000 births, a rate which compares most unfavourably with that of other large towns for the same year. As was the case in Dr. Porter's last annual report, a considerable amount of space is devoted to the subject of infantile mortality. He is evidently not inclined to attach very great importance to the question of compulsorily prolonging the period at present laid down by law during which women shall, after childbirth, absent themselves from work as a means of diminishing infantile mortality; indeed, he thinks that "insanitary conditions of residence, and especially of excrement disposal, may constitute quite as potent a factor of infantile mortality as female factory labour." Dr. Porter is of opinion that some of the proposals for checking infantile mortality in factory towns have approached the subject from "a too purely medical, theoretical, and utopian point of view"; and, with the object of learning something as to the practicability of possible preventive or remedial measures, he visited thirty of the largest mills in Stockport and talked over matters with the managers, overlookers, and operatives. As a result of his inquiries, Dr. Porter is strongly convinced that, to be successful, any proposal for ensuring the better care of infants must be "of a nature to adapt itself to existing conditions" rather than to "suddenly dislocate the deep-rooted customs and prejudices of factory operatives." He suggests that the provisions of the Infant Life Protection Act, 1872, should be so extended as to include women who now receive children for the day, and that thus these persons should be brought under the supervision of the sanitary and other officials. It is also suggested that the coroner shall be notified within twenty-four hours of the occurrence of every death among infants under one year of age. Although Dr. Porter is of opinion that action in the direction indicated would do something to improve matters, he evidently considers that the gradual diffusion of knowledge as to the management of infant life is the direction in which we must in the main look for improvement. There were in Stockport during 1894 37 cases of small-pox, and of these 4 were unvaccinated.

Of these 4 no less than 3 died, while among the remaining 33 vaccinated cases there were no deaths. Dr. Porter brings prominently before his sanitary authority the necessity for adopting a system of excrement disposal other than that by means of the privy pits now obtaining. There are, it appears, no fewer than 5000 to 6000 of these pits in the borough; none of them are properly water-tight, and many are in positions which render the pollution of the subsoil under habitations a matter of certainty. In eighty instances the privy contents have to be carried through living-rooms. The picture Dr. Porter paints of the dangers and defects of these privy pits should certainly induce the sanitary authority to take steps for their abolition. Enteric fever has, he thinks, been frequently spread by means of these "relics of barbarism" in Stockport. In the matter of diphtheria, arrangements have been made with Professor Delépine of Owens College to examine bacteriologically specimens taken from cases suspected of that disease; and we congratulate the sanitary authority, and also Dr. Porter, in having established the system. A charge of 3*s.* to cover expenses is made for each tube, but this charge is defrayed by the sanitary authority in cases where patients cannot afford to pay it.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

In thirty-three of the largest English towns 6273 births and 3861 deaths were registered during the week ending Jan. 11th. The annual rate of mortality in these towns, which had increased in the four preceding weeks from 17·8 to 20·7 per 1000, declined again last week to 18·5. In London the rate was 18·1 per 1000, while it averaged 18·8 in the thirty-two provincial towns. The lowest rates in these towns were 12·3 in Bradford, 12·5 in Cardiff, 13·0 in Sunderland, 16·8 in Swansea, and 15·0 in Plymouth; the highest rates were 22·1 in Birmingham, 22·9 in Preston, 23·5 in Liverpool, 24·0 in Norwich, and 29·7 in Salford. The 3861 deaths included 508 which were referred to the principal zymotic diseases, against 544 and 563 in the two preceding weeks; of these, 199 resulted from measles, 105 from whooping-cough, 73 from diphtheria, 48 from scarlet fever, 40 from "fever" (principally enteric), 37 from diarrhœa, and 6 from small-pox. No fatal case of any of these diseases occurred last week in Swansea; in the other towns they caused the lowest death-rates in Hull, Sunderland, Brighton, Nottingham, and Bradford, and the highest rates in Burnley, Birmingham, Norwich, Wolverhampton, and Salford. The greatest mortality from measles occurred in Liverpool, Blackburn, Norwich, Birmingham, Burnley, and Salford; from scarlet fever in Gateshead; from whooping-cough in Sheffield, Newcastle-upon-Tyne, Bolton, Leeds, and Derby; and from "fever" in Burnley and Bolton. The 73 deaths from diphtheria included 48 in London, 6 in Birmingham, and 3 in West Ham. Three fatal cases of small-pox were registered in London and 3 in West Ham, but not one in any other of the thirty-three towns. There were 66 cases of small-pox under treatment in the Metropolitan Asylum Hospitals and in the Highgate Small-pox Hospital on Saturday last, the 11th inst., against 82, 77, and 68 at the end of the three preceding weeks; 20 new cases were admitted during the week, against 5, 12, and 9 in the three preceding weeks. The number of scarlet fever patients in the Metropolitan Asylum Hospitals and in the London Fever Hospital at the end of the week was 2839, against 2725, 2798, and 2835 on the three preceding Saturdays; 290 new cases were admitted during the week, against 210, 184, and 320 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 318 and 314 in the two preceding weeks, rose again last week to 320, but were less than half the corrected average. The causes of 67, or 1·7 per cent., of the deaths in the thirty-three towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Bradford, Leeds, Sunderland, Newcastle-upon-Tyne, and in nine other smaller towns; the largest proportions of uncertified deaths were registered in West Ham, Birmingham, Leicester, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had increased in the four preceding weeks from 18·9 to 21·0 per 1000, declined again to 19·6 during the week ending Jan. 11th, but was 1·1 per 1000 above the mean rate during the same period in the thirty-three large English towns. The rates in the eight Scotch towns ranged from 12·6 in Leith and 15·4 in Perth to 21·9 in Glasgow and 24·4 in Greenock. The 573 deaths in these towns included 23 which were referred to whooping-cough, 19 to diarrhœa, 14 to measles, 3 to "fever," 2 to diphtheria, 2 to scarlet fever, and not one to small-pox. In all, 63 deaths resulted from these principal zymotic diseases, against 77 and 82 in the two preceding weeks. These 63 deaths were equal to an annual rate of 2·2 per 1000, which was slightly below the mean rate last week from the same diseases in the thirty-three large English towns. The fatal cases of whooping-cough, which had been 35 and 29 in the two preceding weeks, further declined to 23 last week, of which 17 occurred in Glasgow, 2 in Dundee, and 2 in Aberdeen. The deaths from measles, which had been 7 and 10 in the two preceding weeks, further rose to 14 last week, and included 7 in Greenock and 6 in Glasgow. The deaths referred to different forms of "fever," which had declined from 8 to 4 in the three preceding weeks, further fell to 3 last week, of which 2 occurred in Glasgow. The mortality from scarlet fever and from diphtheria was considerably below that recorded in any recent week. The deaths referred to diseases of the respiratory organs in these towns, which had been 142 and 135 in the two preceding weeks, further declined to 131 last week, and were 84 below the number in the corresponding week of last year. The causes of 41, or more than 7 per cent., of the deaths in these eight towns last week were not certified.

HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 23·3 and 28·8 per 1000 in the two preceding weeks, declined again to 28·3 during the week ending Jan. 11th. During the thirteen weeks of last quarter the death-rate in the city averaged 24·0 per 1000, the rate during the same period being 18·0 in London and 17·2 in Edinburgh. The 190 deaths registered in Dublin during the week under notice were within 3 of the number in the preceding week, and included 7 which were referred to the principal zymotic diseases, against 3 and 7 in the two preceding weeks; of these, 3 resulted from diarrhœa, 2 from "fever," 1 from measles, 1 from whooping-cough, but not one either from small-pox, scarlet fever, or diphtheria. These 7 deaths were equal to an annual rate of 1·0 per 1000, the zymotic death-rate during the same period being 2·6 in London and 1·9 in Edinburgh. The 3 fatal cases of diarrhœa exceeded the number recorded in any recent week. The deaths referred to different forms of "fever," which had been 1 and 3 in the two preceding weeks, declined again to 2 last week. The 190 deaths in Dublin last week included 23 of infants under one year of age, and 56 of persons aged upwards of sixty years; the deaths of infants corresponded with the number in the preceding week, while those of elderly persons exceeded those recorded in any recent week. Eleven inquest cases and 9 deaths from violence were registered; and 70, or more than a third, of the deaths occurred in public institutions. The causes of 9, or nearly 5 per cent., of the deaths in the city last week were not certified.

THE SERVICES.

MOVEMENTS OF THE MEDICAL STAFF.

BRIGADE-SURGEON-LIEUTENANT-COLONEL CAREW has been transferred from Colchester to Edinburgh as Principal Medical Officer of the North British District. Surgeon-Majors Magrath and Carter and Surgeon-Lieutenants Smith and Barker have embarked in the *Britannia* for India. Surgeon-Major Allport has arrived on leave from Ceylon. Surgeon-Major Carleton has been posted to Cork, and Surgeon-Lieutenant-Colonel Latchford, retired pay, to Galway.

NAVAL MEDICAL SERVICE.

The following appointments are notified:—Staff-Surgeons: W. Tait to the *Impregnable*; A. W. May to the *Cambridge*; E. Ferguson to the *Benbow*; J. H. Beattie to the *Endymion*; and J. T. W. S. Kellard to the *Inflexible*. Surgeons: V. G. Thorpe, G. Allan, and E. A. Penfold to the *Endymion*; H. B.

Beatty to the *Royalist*; T. E. Honey to Haslar Hospital; G. R. McMahon to the *Hebe*; A. X. Lavertine to the *Dreadnought*; B. G. Heather to the *Stork*; J. D. Hughes to the *Bellona*; W. W. Pryn to the *Orlando*; F. W. Collingwood to the *Penguin*; J. J. Walsh to the *Vivid*; and T. D. Halahan and E. S. Miller to the *Repulse*.

ARMY MEDICAL RESERVE OF OFFICERS.

Surgeon-Captain John Will Cook, M.D., 2nd Volunteer Battalion the Essex Regiment, to be Surgeon-Captain; Surgeon-Lieutenant C. E. L. B. Hudson, F.R.C.S. Eng., to be Surgeon-Captain.

VOLUNTEER CORPS.

Rifle: 4th Volunteer Battalion the Queen's (Royal West Surrey Regiment): Edward Arbuthnot Malcomson, gent., to be Surgeon-Lieutenant. 26th Middlesex (Cyclist): The resignation of Surgeon-Lieutenant R. S. O. Dudfield, M.B., is post-dated to Nov. 2nd, 1895.

THE ROYAL MILITARY COLLEGE, SANDHURST.

The report of the Board of Visitors appointed by the Secretary of State for War for the inspection of the Royal Military College, Sandhurst, has just been issued as a Parliamentary paper. The inspection was made on July 27th, 1895, and the visitors in their report, which is signed by Sir Arthur D. Hayter, Field-Marshal Sir L. A. Simmons, General Sir H. A. Smyth, Lieutenant-General Arthur Lyttelton-Annesley, and Lieutenant-General Julian H. Hall, state that "The health of the cadets for the past year was not so good as usual, owing to the severe epidemic of influenza which attacked the college this spring. No less than 111 admissions from this disease occurred, but as a rule the type was a mild one, only three or four cases having given rise to any anxiety. The average daily sick had been 4·27 out of an average strength of 367, giving a daily percentage of 1·16." In 1893 the Board stated that the wooden canteen used by the subordinates, some 200 in number, was "dangerous, discreditable, and insanitary," and they recommended it should be removed for the safety of the adjacent buildings. Last year they again urged the necessity for the construction of a suitable building. At their last visit they found this canteen in a more evil condition than before, and can now only say that, in addition to being a source of danger to adjacent buildings, it is a disgrace to any public establishment. The Board express their dissatisfaction with the existing time-table, which they consider requires revision. One of the hours of study which seems decidedly out of place is that from 2.15 to 3.15 P.M. The cadets lunch at 1.20 and are therefore unlikely to be in a suitable condition for study, particularly in hot weather. Similarly, the study from 9 to 9.45 P.M. cannot be productive of much benefit to the students. The Board have had before them the standing orders for both Woolwich and Sandhurst, and they are surprised to find that although these establishments are maintained for the same purpose—viz., the education of young gentlemen of about the same age for service in the army—the orders regulating the discipline, education, &c., differ widely in several essential points. The Board recommend that they be revised and made to agree as much as possible. There are five cadets in excess of the establishment, but none of them live outside the college.

THE FRENCH IN MADAGASCAR.

The publication of a Madagascar Yellow-book has naturally recalled attention to the late expedition. According to the latest accounts the sanitary condition of the French troops in Madagascar is now fairly satisfactory. The government and administration of the country by the French are very well and judiciously carried on by General Duchesne and his force. The expedition, from a hygienic point of view, was attended with deplorable results. As regards the clothing, feeding, cooking, water-supply, regulation of work and duties, sanitary precautions, and medical supplies there were lamentable deficiencies, causing an amount of misery and mortality which might, in great part at any rate, have been avoided. It is not possible, of course, to protect troops altogether against the effects of a hot and malarious climate and unhealthy environment, but a good deal may nevertheless be done in this direction which, in defiance of medical opinion, was altogether disregarded and left undone during the late expedition. The Madagascar campaign furnishes a warning, and an object-lesson of the results of neglect of the hygiene of war which deserves to be carefully studied by Governments and military departments. We are sincerely sorry for the hardships and sufferings undergone by the French troops, who set an excellent example of fortitude, gallantry, and discipline throughout the campaign.

INDIAN HYGIENE.

An experimental trial is being made of the Pasteur filter in the cantonment of Dum Dum in connexion with the health of the British army in India. There can be no doubt that the use of this filter in the French army, and of a somewhat similar one in the German army, for the sterilisation of water, has been attended with very successful results in diminishing the prevalence and mortality of typhoid fever. We have frequently called attention to the very serious amount of this disease among our troops in India. In the late Chitral campaign it made its appearance in the camping grounds and caused a number of deaths among the British troops, just as had previously been the case in the Afghan campaigns. The wholesale introduction of these filters into India would, no doubt, involve a large expenditure, but the Indian Government would be fully justified in incurring that expense if the trial of these filters at some selected stations was followed by a decided decrease in the cases of typhoid fever. Of course the thing to be aimed at is that the water-supply for potable purposes is obtained from a pure source and free from all liability to contamination, and that it is kept pure until it reaches the troops, in which case no filters are necessary, but this cannot always be done.

THE ASHANTI EXPEDITION.

News regarding the force advancing on Kumasi may be expected at any time, for the force must now be very near to, if not in, the Ashanti capital. Of course, there has been a certain amount of disease among the troops—cases of heat apoplexy, malarial fever, and dysentery. Climatic fever is the main source of the sickness, and it has occasionally been of a severe or even fatal type. Prince Henry of Battenberg felt the heat a good deal during the march from Cape Coast Castle to the Prah, and not long after crossing that river was attacked with fever of malarious origin which rendered it very inadvisable for him to continue the march with the troops, and he consequently returned. The climate of the uplands is much healthier and better than that of the seaboard, and it is understood that the principal medical officer of the expedition is on the look-out for some locality which may act hereafter as a hill station or sanatorium for the troops.

THE SANITATION OF BANGALORE.

Bangalore, notwithstanding its favourable position and climate, is not so healthy an Indian station as it should be. Many cases of enteric fever have occurred from time to time, and not long ago an outbreak of cholera arose at that station in connexion with which Surgeon-Major Ross was sent there from Secunderabad on special duty. The Bangalore station municipality have applied for the retention of this officer's services in order that plans for the establishment of an improved conservancy system for the station may be completed and a public health department formed.

NAVAL MEDICAL SUPPLEMENTAL FUND.

At the quarterly meeting of the Directors of the Naval Medical Supplemental Fund, held on Jan. 14th, Inspector-General W. H. Lloyd, M.D., in the chair, the sum of £117 was distributed among the several applicants.

The Queen has been pleased to give her Royal licence and authority to Surgeon-Lieutenant-Colonel T. J. Gallwey, A.M.S., to accept and wear the insignia of the Turkish Order, Medjidieh (third class). The decoration has been conferred by the Khedive of Egypt, authorised by the Sultan, in recognition of the services of this officer while actually and entirely employed under the Egyptian Government.

The next examination of Surgeon-Captains at home and abroad for promotion will be held on the 27th and 28th of this month.

PAINLESS SLAUGHTER OF CATTLE.—The trial of a Painless Cattle-killer took place last Tuesday at the slaughter-house at Malton, under the auspices of the Church Society for the Promotion of Kindness to Animals and the Church Sanitary Association. Two beasts were killed by a master butcher of the town, instantaneously and painlessly, to the satisfaction of all present.

Correspondence.

"Audi alteram partem."

WHAT IS A NATURAL LABOUR?

To the Editors of THE LANCET.

SIRS,—The amount of comfort which certain members of our profession derive from the consideration of the term "natural labour" reminds me of an old Scotch lady who was often heard to say that her existence would be quite insupportable but for that blessed word "Mesopotamia." Having occasion to speak on this subject at the meeting of the Lancashire and Cheshire Branch of the British Medical Association, held at Liverpool on Jan. 8th to consider the Draft Midwifery Nurses Bill of the General Medical Council, I thought it wise to submit the definition clause of that Bill, which contains the term in question and also some others of very vague import, to Messrs. Boote and Edgar, solicitors, Booth-street, Manchester, who kindly furnished me with a valuable legal opinion. The definition clause of the Bill reads thus:—

"Clause 2. *Definitions.*—In this Act the term 'midwifery nurse' means a woman who attends cases of natural labour and afterwards tends the mother and child during the lying-in period, under such rules, regulations, and medical control and supervision as may be from time to time laid down by the Midwifery Nurses Board."

The questions submitted, and the legal answers to the same, I append:—

Questions.—What is the legal significance of the term "natural labour" and the words "medical supervision and control"? Do the latter words necessarily imply medical assistance? Having regard to the meaning of these terms, what legal powers in restraint or regulation of practice have the Midwifery Nurses Board under this Bill?

Legal opinion.—"It is impossible to say what is the legal significance of the term 'natural labour.' If any question arose in a court of law as to its significance, the court would have to rely upon the evidence of experts—i.e., medical gentlemen. In all probability the words 'natural labour' would be defined to mean a labour which originated other than artificially—i.e., by the means of accident, drugs, or instruments, or other than in the ordinary course of nature. There is no special legal significance attached to the words 'medical supervision and control.' These words do not necessarily imply medical assistance, and it would be quite competent for the Midwifery Nurses Board to dispense with the same. How the ease or difficulty of a labour affects its perfect 'naturalness' is hard to understand, and I hope, in connexion with any proposed midwifery legislation, to hear no more of such a blockhead of a term as 'natural labour.' It is also very desirable that the Midwives Board should not have power to dispense with medical assistance, but that the obstetric functions of the midwife should be very clearly stated in the Act itself."

I am, Sirs, yours faithfully,

Salford, Jan. 11th, 1896. W. FRASER.

"DEATH RETURNS IN THE STRAITS SETTLEMENTS."

To the Editors of THE LANCET.

SIRS,—I notice in THE LANCET of Nov. 2nd, 1895, which has just reached me, a letter from Dr. Simon, Registrar-General, Straits Settlements, dealing with certain statements of your Singapore correspondent. I regret that you did not consider it necessary to publish the letter on the same subject which you received from me along with Dr. Simon's, as it would have shown that, though your correspondent, in dealing with the Colonial Secretary's letter of June 14th, was in error in asserting that the medical officer of health had no information of the rise in the death-rate in April till June 1st, he would have been correct had he stated that the weekly statistics furnished to the health officer, giving no particulars of residence and no indications of zymotic disease, could not have guided that official in house-to-house visitations or inquiry as to concealment of infectious disease, the absence of such inquiry forming apparently the burden of the complaint of the local Government. I regret to have again to trouble you with a letter on this subject, but, in justice to your correspondent as well as to myself, I feel that I cannot allow your editorial note that you had received from me a communication "to the same effect" as Dr. Simon's letter to go without correction. I enclose a copy of my former letter. I remain, Sirs, yours faithfully,

W. R. C. MIDDLETON, M.B., C.M., D.P.H.,
Nov. 26th, 1895. Medical Officer of Health for Singapore.

[COPY OF LETTER OF OCT. 1ST.]

"*To the Editors of* THE LANCET.

"SIRS,—Permit me to correct a slight inaccuracy in the letter of your Singapore correspondent appearing in the issue of THE LANCET of Aug. 31st. Under the heading of 'The Government and the Municipality' your correspondent states that 'the death return for April was delivered by the Government to the municipal authorities so late as June 1st, that this was the first official indication to the medical officer of health that the death-rate in April was so unusually high.' This latter statement is incorrect. Weekly returns are furnished by Government to the medical officer of health from which the death-rate can be calculated. But these returns furnish only the causes of death and the numbers dying from each cause which are registered at the various police stations. No indication is given of the localities in which these deaths occur, and thus information is not supplied on a point of the first importance if any steps are to be taken to detect the existence and prevent the spread of epidemic disease. In the monthly returns furnished by the Government to the medical officer of health full information is given of the name, age, sex, nationality, occupation, residence, &c., but these returns only reach the medical officer of health in the latter half of the month succeeding that in which the deaths occurred, and thus may be too late for the adoption of any preventive measures. Were the particulars mentioned in the monthly reports supplied also in the weekly, a valuable aid would be given to the medical officer of health in the suppression of outbreaks of zymotic diseases.

"I am, Sirs, yours faithfully,
"W. R. C. MIDDLETON, M.B., C.M., D.P.H.,
"Medical Officer of Health, Singapore.

"Singapore, S.S., Oct. 1st, 1895."

To the Editors of THE LANCET.

SIRS,—In THE LANCET of Nov. 2nd, 1895, which has just arrived, I notice a letter from Dr. Simon, Principal Civil Medical Officer and Registrar-General of Births and Deaths, Straits Settlements, in which he states that there are two misstatements in the "Notes from Singapore" which you were so good as to publish on Aug. 31st. Dr. Simon has, however, carefully avoided the main issues of the case, and has written in such a manner as to mislead those who are ignorant of the present inefficient method of death registration in vogue in these Settlements, and to which you yourselves had previously drawn attention in the columns of THE LANCET.[1] In the paragraph in the Singapore letter headed "The Government and the Municipality" I attempted to demonstrate not only the unfairness but also the absurdity of the Government in attempting to blame the Commissioners for want of attention and supervision on the part of their medical officer. The Governor was of opinion that, with the data given him, the municipal health officer ought to have suspected the presence of "some cause of death intentionally or carelessly kept back by the natives," &c.

Now, Sirs, let us see whether, with the data to hand, it can be expected that the municipal health officer is able to gain such information at a date early enough to be of any real service to the community. Every week the Registrar-General transmits to the municipal health officer a return of the deaths occurring within the municipal limits. Upon this Dr. Simon lays such great stress in his letter that your readers must consider that these returns are of a full and reliable nature. But are they? Certainly not, you will say when I inform you that the sole information recorded is the number of deaths and the causes of these notified at each of the police stations during the past week. It is only in the monthly returns that the name, nationality, occupation, &c., and, most important of all, the place of residence, are given. The weekly returns are practically useless as they are at present made out. The municipal health officer may suspect the prevalence of a fatal epidemic from the fact of an increased death-rate being recorded in a police district, but in the absence of the addresses of the deceased he cannot verify his suspicions until the monthly returns are forthcoming. What a hold an epidemic may obtain under these conditions may be well imagined, especially when one considers that in this special case the April returns were not available until towards the end of May. Surely when they had lain in the hands of the Principal Civil Medical Officer for a whole month some suspicion with respect to the unusually high death-rate might be expected to

[1] THE LANCET, Aug. 10th, 1895.

have arisen in his mind. Considering the facts of the case in an impartial manner, one is drawn to the conclusion that the onus of the delay in recognising the prevalence of cholera lies with the Government and not with the municipality. That such a delay in transmitting the monthly returns is not unique is proved by the fact that, at a meeting of the municipal commissioners on Oct. 23rd, the president apologised for his inability to present the returns for September, as they had not yet been received from the Registrar-General. On inquiry I find that they were received on Oct. 29th. Given reliable returns, the occurrence of a number of deaths in, say, one house would at once arouse suspicion. The house would be visited by the municipal health officer without delay, and the reason for the high death-rate might at once be discovered. It did happen that in these April returns, which arrived a month late, eleven deaths were found to have taken place within one house. So far as the system holds at present, these deaths were almost certainly recorded as deaths from "fever," of which the number was excessive in these April returns, whereas in all probability they were due to cholera.

In Penang there has been in vogue for the past five years such a weekly return as I now call for, and the plan works admirably. Why it should not obtain in Singapore, which is immediately under the eye of the Registrar-General, is beyond my comprehension. The fact is that the present system is an exceedingly imperfect one. Even although these weekly and monthly returns are published, one cannot rely upon their authenticity so far as the causes of death are concerned. This has been already shown by Dr. Dumbleton, a former medical officer of health for Singapore, in a paper which you have lately quoted so freely in your columns. The Government itself recognises this and has already published in the *Government Gazette* the draft of a "Bill to amend the Law with respect to the Registration of Births and Deaths," a copy of which I enclose. I trust that this Bill will come before the Legislative Council at an early date and that no further delay will be incurred in making it active.

With regard to your statement that you have received a communication from Dr. W. R. C. Middleton, Medical Officer of Health for Singapore, to the same effect as Dr. Simon's letter, I am exceedingly disappointed in that you did not think fit to publish it. As the writer of the "Notes from Singapore" allow me to subscribe myself—

Your obedient servant,

Singapore, Nov. 26th, 1895. A CORRESPONDENT.

"WORD-BLINDNESS AND VISUAL MEMORY."

To the Editors of THE LANCET.

SIRS,—With regard to Sir William Broadbent's note[1] on my communication on "Word-blindness and Visual Memory," with your permission I should like to make a few brief observations. I have delayed replying until I was able to read over the cases referred to by him. Whilst at once admitting that previously to Kussmaul's article in Ziemssen's Cyclopædia attention had been directed to the condition subsequently termed "word-blindness," I still assert that "Kussmaul first clearly pointed out that blindness for words is capable of being met with clinically as an isolated condition." Kussmaul's words are: "A complete text-blindness may exist, although the power of sight, the intellect, and the power of speech are intact." In the cases referred to by Sir William Broadbent, and reported by him in the Transactions of the Royal Medical and Chirurgical Society before the publication of Kussmaul's article, the patients were unable to read printed and written characters, but in all of them there were other speech disturbances present—e.g., verbal aphasia or amnesia in a greater or less degree. In the case reported in THE LANCET of Dec. 21st, 1895, I have taken especial pains to point out that there were no speech difficulties whatever, the mental defect being strictly limited to an inability to recognise all the printed and written characters, which were previously known to the patient, with the exception of Arabic numerals, and hence my reference to Kussmaul as being the first to point out the possibility of such a condition being met with clinically.

I am quite in agreement with Sir William Broadbent when he states that the term "word-blindness" is somewhat misleading. In my communication I have stated that the terms "word-blindness," "cécité verbale," and "Wortblindheit" are not sufficiently precise without further definition, as there are different forms which must be carefully distinguished from one another. When a patient cannot read it is altogether inaccurate and misleading to label it as a case of "word-blindness" without more detailed examination. Our increased knowledge of this condition now demands a more accurate description of the exact nature, character, and extent of any defect to interpret written or printed symbols. Sir William Broadbent asserts that "word-blindness" in his experience "has always been associated with inability to name an object presented to the vision, and that, if a man cannot name a watch, *a fortiori* he cannot name a word." Now it seems to me that he misapprehends the essential character of my case and of similar cases belonging to this class. In my patient the difficulty was not in naming the word, but in recognising the individual letters of which each word was composed. When a word was spelt out to the patient letter by letter he named it without a moment's hesitation, and when he learned to recognise the individual letters, again by persistent practice, he could read. Such cases, in my opinion, would be more correctly described by the term "letter-blindness." On the other hand, cases are on record where the patient, whilst recognising the individual letters, could not combine these into syllables and words, and even these cases may be divided into different categories. Hence it is evident that in every case where there is inability to read the symptom should be carefully analysed and the exact character and extent of the defect recorded. When we possess a larger number of accurately recorded cases it may be possible to arrive at a clearer classification and a more precise nomenclature, and I hope that in the future such cases will be subjected to a more comprehensive, rigorous, and exact examination than they have hitherto for the most part met with.

I am, Sirs, yours very truly,

JAMES HINSHELWOOD.

Elmbank-street, Glasgow, Jan. 11th, 1896.

[1] THE LANCET, Jan. 4th, 1896.

THE HADDEN FUND.

To the Editors of THE LANCET.

SIRS,—Will you kindly insert in your next issue the enclosed list of subscribers to the above fund up to this date? These gentlemen have responded promptly to the appeal contained in THE LANCET of Jan. 4th, and I would ask all who intend to give their substantial support to Dr. Hadden in a matter which concerns the entire profession to do so without delay.—I am, Sirs, yours faithfully,

JAMES CRAIG,
Hon. Sec. and Treasurer.

York-street, Dublin, Jan. 13th, 1896.

	£	s.	d.
Dr. J. W. Moore, Dublin...	1	1	0
Sir Thornley Stoker, President R.C.S.I.	1	1	0
Dr. E. H. Bennett, Dublin	1	1	0
Mr. H. R. Swanzy, Dublin	1	1	0
Mr. Kendal Franks, Dublin	1	1	0
Dr. Walter Smith, Dublin	1	1	0
Dr. Wallace Beatty, Dublin	1	1	0
Dr. Duffey, Dublin	1	1	0
Dr. O'Carroll, Dublin ...	1	1	0
Dr. Parsons, Dublin ...	0	10	6
Mr. F. T. Heuston, Dublin	1	1	0
Mr. J. H. Scott, Dublin ...	1	1	0
Dr. C. E. Fitzgerald, Dublin	1	1	0
Dr. H. C. Tweedy, Dublin	1	1	0
Sir Wm. Stokes, Dublin	1	1	0
Mr. Bernard, Derry... ...	1	1	0
Dr. Drury, Dublin	1	1	0
Dr. Harley, Dublin	1	1	0
Dr. Craig, Dublin	1	1	0
Dr. Little, Dublin	1	1	0
Dr. Grimshaw, President R.C.P.I.	1	1	0
Dr. F. W. Kidd, Dublin...	1	1	0
Sir C. Nixon, Dublin ...	1	1	0
Mr. Wm. Thomson, Dublin	1	1	0
Mr. Arthur Benson, Dublin	1	1	0
Dr. McCutcheon, Dublin	1	1	0
Dr. Jos. Redmond, Dublin	1	1	0
Dr. Bewley, Dublin... ..	1	1	0
Dr. Wright, Dalkey... ...	1	1	0
Dr. Huggard, Davos-Platz	1	1	0
Dr. David Hadden, Wexford	1	1	0
Sir C. Cameron, Dublin...	1	1	0
Sir P. C. Smyly, Dublin...	1	1	0
Dr. J. M. Finny, Dublin...	1	1	0
Dr. Pollock, Blackrock ...	1	1	0
Dr. S. R. Mason, Dublin...	1	1	0
Dr. P. W. Maxwell, Dublin	1	1	0
Dr. W. Moore, Physician in Ordinary to the Queen	1	1	0
Mr. J. B. Story, Dublin...	1	1	0
Mr. E. S. O'Grady, Dublin	1	1	0
Dr. J. J. Cranny, Dublin	1	1	0
Dr. John Murphy, Dublin	1	1	0

MEDICAL CERTIFICATES AND THE LONDON SCHOOL BOARD.

To the Editors of THE LANCET.

SIRS,—There is a widespread feeling abroad that the strained relations between the medical profession and the School Board in London on the subject of medical certificates are likely to be injurious to the public interests as well as to those of medical men. In conjunction with Dr. Ward Cousins and others I am trying to organise a meeting of those

on whom the burden of giving medical certificates to School Board children falls, with a view to a deputation to the School Board on the subject. We shall be glad to receive the names of medical practitioners in the metropolitan area, whether in general or hospital or dispensary practice, who sympathise with us in our desire to make certification effective and to secure due respect to the medical profession. An immediate intimation will oblige.

I am, Sirs, your obedient servant,
JAMES GREY GLOVER, M.D. Edin.

25, Highbury-place, N., Jan. 15th, 1895.

WOMEN AND THE PROFESSION IN INDIA.

To the Editors of THE LANCET.

SIRS,—With reference to a remark made regarding Zenana work in India at an extraordinary Comitia of the Royal College of Physicians of London,[1] held on Oct. 24th last, that "there was no difficulty in the way of medical men entering the most jealously guarded harems when there was need for their services," it is to be observed that such a remark strictly applies only to Bengalees—i.e., Hindoos of Bengal—in Calcutta and Lower Bengal. These same people when in Upper India strictly seclude their women in harems. I submit that in the North Western Provinces, Oudh, the Punjab, and Rajpootana women of the upper and middle classes of all the various nationalities, Mahommedan women especially, are kept in such strict seclusion in the harems or Zenanas that medical men cannot have access to them. A medical man when requested to treat a native woman is expected to judge of all symptoms by feeling the pulse. A screen is made by holding up a cotton sheet across the room; on one side of the screen are the patient and her female friends, on the other the medical man and her male friends. The patient's hand is then passed under the screen and the pulse is felt; if the tongue is to be examined a slit is made in the screen and the patient thrusts her tongue through it for inspection; if the eyes are to be examined the patient places one eye by turns at the slit; if palpation of organs is requisite the medical man passes his hand under the screen. Stethoscopic examination is made only after the patient has been scrupulously covered so that no part of her person is exposed excepting the part to be examined.

In the troubles of parturition a medical man is either not permitted to render manual aid, or, when permission is granted, it is often too late to save life. I have before me a case of arm presentation in the wife of a Hindoo of the shopkeeper caste; permission was delayed for days, and when examination was made the fœtus was putrid and the mother in the last stage of exhaustion. Delivery was effected by evisceration of the uterine contents, and the mother succumbed to tetanus. Now, had there been a qualified midwife or lady medical practitioner at hand, the mother at least would have been saved. Another painful case was that of a Mahommedan woman in labour, a primapara, whom I was asked to treat. She had been some days in labour, and the head was *said* to be presenting. No manual examination could be permitted. I could do nothing except cautiously give a dose or two of ergot. No effect following its administration, I declined to do anything further unless allowed to examine the patient. From the state of the pulse I gathered that she was rapidly sinking. I brought this fact home to her friends and begged that an examination might be allowed, and I said that if the native midwife had correctly reported as to the presentation safe and rapid delivery could be effected. Her father-in-law and husband said that they would be disgraced if they permitted the examination. *The woman died undelivered* while I was still in the house. But, irrespectively of parturition, there are, we know, innumerable conditions where, to afford efficient treatment, it is imperative that the medical man should see and thoroughly examine his patient. Not to speak of surgical treatment, even medicinal treatment often requires examination not practicable under the Zenana system. The well-to-do classes will not allow it, and hence a vast amount of suffering within reach of relief goes unrelieved. The poorer women of those classes who attend at our dispensaries often come when it is too late; or, when they attend at a dispensary in which there is a native female hospital assistant they stipulate that they shall not be subjected to examination by a male. If there is no difficulty in medical men entering harems the whole of Lady Dufferin's noble philanthropic scheme for affording medical aid to Indian women must be declared uncalled for; but the response made to the call for funds for the scheme by the wealthy natives and princes of India speaks unmistakably of the usefulness of the institution, and Lady Dufferin's name will never fade from the memory of India's daughters.

I am, Sirs, yours obediently,
G. D. MCREDDIE, M.D. BRUX.,
Late Civil Surgeon in India (retired).

Stone-court, Greenhithe, Kent, Dec. 26th, 1895.

[1] THE LANCET, Nov. 2nd, 1895.

FRACTURES OF THE LOWER LIMB.

To the Editors of THE LANCET.

SIRS,—In a lecture on Fractures of the Lower Limb by Mr. Christopher Heath, published in THE LANCET of Jan. 4th, 1896, I find the following: "I would remind you how important it is, in fracture of the leg particularly, that the fracture should be set thoroughly and accurately. Of course, I know well there are many difficulties. Immediately after the accident all the muscles of the limb are more or less in a state of spasm, and tend, therefore, to pull the bones into abnormal positions, but that state of spasm passes off in the course of a few hours, and you can generally manage with care and patience to put the limb in a proper position, and unless this is done, and done accurately, the surgeon has not treated the case properly." And again: "I may say that this method of pegging and screwing has been recommended by an enterprising surgeon, not only for compound, but for simple fractures. But I cannot conceive how anyone can believe that it is justifiable to convert a simple fracture into a compound fracture, and of this I am quite certain, that the majority of surgeons for the present will remain content with the usual methods of treatment."

Now, Sirs, I agree most thoroughly with a portion of Mr. Heath's statement as far as I understand it—namely, that *if the ends of the fragments are not put in accurate apposition* and the bone restored to its normal shape *the surgeon has not treated the case properly*. But I maintain, as I have done over and over again, that in the large proportion of oblique fractures of long bones, especially of the lower extremity, it is impossible to do this by means other than operative. I would quote the following lines from a short paper on the subject of the treatment of fractures published by me:[1] "It is very possible that I may be accused of exaggerating the evil results of the treatment of fractures in the present day, and that many may not be inclined to agree with the mechanical principles upon which my statements are based. It is, however, quite open to anyone to prove the former by publishing an account of a series of fractures sustained at the same period of life which show better results, and the latter are capable of absolute demonstration." Surely, as I pointed out here, the question of the possibility of reconstituting the form of the bones by means of splints is, if true, capable of complete verification. As Mr. Heath asserts that he is able to do this, may I ask him to produce, at a meeting of the Clinical Society of London, a series of half-a-dozen cases of oblique fractures of the tibia and fibula, and a similar number of Pott's fractures, which he has treated in sequence, and give the Fellows of the Society an opportunity of forming an opinion on the success of his treatment and on the wisdom of the statement which he makes—namely: "But I cannot conceive how anyone can believe that it is justifiable to convert a simple fracture into a compound fracture," &c.? We are all anxious to learn the best modes of treating fractures, and Mr. Heath's very clear statements of his views on the subject give us an excellent opportunity of doing so.

I am, Sirs, yours faithfully,
W. ARBUTHNOT LANE.

St. Thomas's-street, S.E., Jan. 14th, 1896.

"A PLEA FOR THE PASTEUR TREATMENT OF HYDROPHOBIA."

To the Editors of THE LANCET.

SIRS,—Dr. H. Howard Murphy's argument in pleading for the Pasteur treatment of hydrophobia would be cogent if the

[1] Brit. Med. Jour., April 20th, 1895.

premisses on which it is founded were sound; but I doubt whether this is the case, and I should like to point out where they seem to be at fault. In the first place, I would disclaim all sympathy with the objects and methods of the Anti-vivisection Society, though I admit that their compilation of deaths following Pasteurism is useful, for this has been neglected by everybody else. In the last nine or ten years—i.e., since M. Pasteur's treatment was commenced—very nearly 17,000 persons have been subjected to the treatment at the Paris Institute, and 283 of these have died from hydrophobia. Dr. Murphy assumes that 20 per cent. of these 17,000—i.e., 3400—would have died but for this treatment (I presume that the figures 30 per cent. and 3200 given in his letter are printer's errors). This amounts to an average of 340 per annum. This assumption is derived partly from *à priori* reasoning from principles based on M. Pasteur's experiments, and partly from guesses at the probable frequency of the development of hydrophobia in those persons who have been bitten by presumably rabid animals. There is, as far as I know, no *à posteriori* evidence to confirm it, and in the absence of such evidence it cannot be held to be proved that M. Pasteur has saved a single case. It is quite possible that there may be some fallacy in the experiments, or that the frequency of hydrophobia among bitten cases has been largely over-estimated. Now, of these 17,000 by far the majority (nearly seven-eighths, I believe) come from France alone. It would, therefore, follow (according to Dr. Murphy) that M. Pasteur's treatment has saved nearly 300 natives of France (seven-eighths of 340) from hydrophobia every year. How many other cases of hydrophobia there may be every year in that country which have not undergone preventive inoculation, I do not know. This number seems incredibly large for a population scarcely, if at all, out-numbering that of the British Isles, and, moreover, one has not heard of any great prevalence or extensive outbreak of rabies in that country.

Can it not be shown by official statistics whether or not the mortality from hydrophobia in France has been reduced to a corresponding degree by 300 or by any other number per annum since the introduction of Pasteurism? If it can be shown to be so reduced it would, of course, furnish, in the absence of any other explicable cause, strong, almost conclusive, support to the theory of M. Pasteur's followers, and I should be most happy to know it. Dr. Murphy further says, with regard to fatal cases of hydrophobia, that "till 1880 (1886?) every conceivable plan of treatment had been tried, and none proved in the least effectual." And, again: "Every one of the 283 died in spite of every effort to save them." I demur to this. There are many cases on record which have been successfully treated. I collected a series of them and published an abstract of it in your columns in March, 1890.[1] Since then I have read reports of several fatal cases, and in not one of them has any real effort been made or have any efficacious means been attempted to save them. It is really painful to hear of the utterly ineffectual and futile methods that are the only ones resorted to with the hope of curing or relieving the patients. In such desperate cases history shows that anything but skilful and heroic treatment is seldom of any avail, very free blood-letting being the sheet-anchor. Dr. Murphy says that "the medical profession is not biased in favour of antirabic inoculation." I do not agree with this statement, for it appears to me that an undue amount of faith is almost invariably placed in any novel method of treatment emanating, with a scientific hall-mark, from a pathological laboratory—witness the tuberculin fiasco. And, on the other hand, there is still a deplorable prejudice, owing to ignorance and timidity, against blood-letting, the disuse of which, as Sir B. W. Richardson truly said twenty years ago, makes the present age the most feeble and ineffectual, in the matter of treatment, in the whole history of medicine.

I am, Sirs, yours faithfully,

F. LUCAS BENHAM, M.D. Lond.

Elizabeth-street, S.W., Dec. 23rd, 1895.

P.S.—The number of deaths from hydrophobia among persons who have undergone M. Pasteur's treatment is given in the *Annales de l'Institut Pasteur* as eighty-four up to the end of June, 1895. Why is this number alone given, instead of the much larger figure of the Anti-Vivisectionist Society's statistics? Does not the Pasteur Institute follow up the subsequent history of its cases?

[1] THE LANCET, March 1st, 8th, and 15th, 1890.

"ANTI-STOOP" v. SHOULDER-STRAPS.

To the Editors of THE LANCET.

SIRS,—I regret that Mr. Bernard Roth in his letter to THE LANCET of Dec. 14th last should have so erroneously described my "anti-stoop" as to apply to it the term "useless straps." If he will examine the appliance himself at Messrs. Arnold and Sons, or even the diagrams which appeared with your notice of it on Nov. 23rd, 1895, he will see that the only straps about it are the belt round the waist and the back strap connecting the appliance to the belt, neither of which are in the slightest degree essential to its efficacy. With regard to Mr. Roth's objection to all mechanical aids to correct roundness of the shoulders I have nothing to say. His quotation of an eminent authority in support of this view has been sufficiently dealt with by Mr. Heather Bigg in THE LANCET of Dec. 21st, 1895. But I might observe that his quotation had reference to an appliance very different from my "anti-stoop." The circumstances which caused me to invent my "anti-stoop" did not have their rise in a desire to reap riches from its sale. Having always been round-shouldered, I had endeavoured in vain to obtain a cure by shoulder-straps and had suffered much pain from their use. It then occurred to me that a pair of steel arms coming up the back and branching out below the neck, so as to pass over and to the front of the shoulders and there to exert a "springy" elasticity to press the shoulders backwards, would not only be painless if the pressure were transmitted by means of padded blocks, but would probably be effective also. I accordingly had a pair made and wore them for a little over two months, by which time I had received incalculable benefit. I was fully two inches broader across the chest after than I had been before, and narrower to about the same extent across the back. In fact, the coats which I possessed before donning my "anti-stoop" were at the end of these two to three months quite unwearable.

Just a few words regarding the evanescent character, as Mr. Roth declared it must necessarily be, of any such improvement brought about by mechanical means. I have not once worn my "anti-stoop" during the last nine or ten months, but, so far as my friends or I myself have been able to notice, there has been no reversion to the round-shoulderedness which before had been so conspicuous. I attribute this result to the fact that my "anti-stoop" does not splint the shoulders back and keep them so—thus superseding the muscles of the back, as Mr. Roth seems to assume—but that, by acting as a continuous and slightly assistant reminder to the wearer to hold himself or herself up, it stimulates the use of those muscles and thus strengthens and invigorates them.

I am, Sirs, yours truly,

W. A. CARSON,

Eccles, Dec., 1895. Inventor of the Carson "Anti-stoop."

THE PROTECTION OF THOSE NURSING PATIENTS SUFFERING FROM DIPHTHERIA AND OTHER SPECIFIC INFECTIOUS DISEASES.

To the Editors of THE LANCET.

SIRS,—Some few years ago, when in correspondence with my friend, the late Professor Tyndall, on the above subject, I asked him whether he thought it probable that a suitable covering of antiseptic cotton wool to the nose and mouth of those engaged in nursing sufferers from the above diseases would act as a filtering agent to the micro-organisms. His reply was in the affirmative. I am anxious to know whether your readers have had experience of this method, and more especially so in cases of typhus fever and diphtheria.

I am, Sirs, yours truly,

St. Leonards, Jan. 15th, 1896. SAMUEL LEE.

THE MEDICAL EDUCATION OF WOMEN.

To the Editors of THE LANCET.

SIRS,—Now that most of the portals of medicine are open to women, and that it remains but for time to speak as to the viability and vitality of the movement, it may not be out of place to suggest that the deans of the schools of medicine for women should recommend some age limit under which

the study of medicine should not be commenced. In one of the northern schools of medicine for women one child aged sixteen has entered the session, and several more under twenty years of age; for a time some were attending classes with their hair down and in short dresses. As a not unnatural consequence of such an unseemly state of things one comes across one such student in tears over the difficulties of a tough bone, another in a state akin to ecstasy over the suggested simple solution of a supposed problem, and so on—certainly *ad nauseam* and almost *ad infinitum*. Most of our hospitals have some age limit under which women are not admitted to learn nursing. May not the "younger sister" well take a leaf from the book of its "elder sister"—the nursing profession—in this respect? If this is not done, and the above condition of things continues to obtain, it might be well for the dean of any such school to slightly alter its title and term it in future, "School of Medicine for Women *and Children*."

I am, Sirs, yours faithfully,

Jan. 15th, 1896. AUTO.

DIAGNOSTIC DIFFICULTIES IN THROAT CASES.

To the Editors of THE LANCET.

SIRS,—The following cases occurred to me in December, 1895. On Dec. 12th I found two girls, seven and ten years of age respectively, suffering from suspicious sore throat, with enlarged tonsils and greyish-white spots over these and the fauces. Both attend a school which is seldom free from diphtheria or scarlet fever. There was no rash, but high fever and considerable depression. These I notified as "diphtheritic throat," for want of a better term. On the 16th an elder brother exhibited a similar, though less severe, sore throat, and was only laid up for a day or two. On the same day a boy aged six years fell ill with sore throat, and I notified these in the same way as the first two. Forty-eight hours later the latter patient had a well-marked scarlet rash, and I thereupon notified him again as suffering from scarlet fever. The mother, who nursed all these children, fell ill with sore throat on the 24th, and was notified at once as suffering from "scarlet fever or diphtheria." She was removed to hospital before the rash appeared, and I see that the medical officer of health, in sending in my account for confirmation, has corrected my primary diagnosis and has called them all "scarlet fever." I make no objection to this, being in some doubt myself; and it is but fair to state that a bacteriological examination of the first two cases gave negative results as regarded the Löffler bacillus, although alike streptococci, diplococci, and organisms resembling Bacillus coli communis when stained with ordinary aniline were present; all but the former two disappeared on staining by Gram's method. The above were taken direct from the tonsils, and the next day I inoculated a serum-agar tube from the elder girl's tonsils, and obtained a growth in two days which gave identical results. In another throat case in a young fellow aged twenty, where there was a temperature of 100° F. and an abundance of greyish spots on the soft palate, cheeks, and gums, together with much depression followed by considerable cardiac weakness, bacteriological examination gave like results, and on being asked by the relatives to state whether it was diphtheria I gave a negative reply on the strength of the bacteriological examination. These are some of the difficulties which beset us now in practice, and they are not diminished by the recent debate on diphtheritic bacilli by the Pathological Society. Is it possible that the pyogenic organisms play a more extensive *rôle* than is already attributed to them, and that their presence in suspicious throats may indicate a more than casual connexion with scarlet fever and diphtheria? I may say, in conclusion, that in both houses deaths have taken place from scarlet fever and diphtheria within the last two years. In my microscopic examinations I had the able assistance of Dr. Kanthack and his assistants.

I am, Sirs, yours obediently,

London, Jan. 10th, 1896. M.D.

AT Leeds, on Monday last, Henry A. Albutt, who had been struck off the Medical Register for publishing certain books, and afterwards, it was alleged, continued the use of the letters "M.R.P.L.S.A.," was fined £5 and 2 guineas costs for falsely taking and using titles implying he was registered under the Medical Act of 1858.

THE BATTLE OF THE CLUBS.—XVII.[1]

(FROM OUR SPECIAL COMMISSIONER.)

(Continued from p. 71.)

BIRMINGHAM: THE PROFESSION AND THE FRIENDLY SOCIETIES.

THE hardships of contract work for friendly societies were brought under my notice by several practitioners in Birmingham. A consulting physician related that he had once been on the list of consultants for the friendly societies dispensary. Here a medical man is employed at a fixed salary and has to reside on the premises. On one occasion this medical officer came to fetch the consultant to see the ex-president of the friendly society, who lived some three miles away. As this patient exercised great influence in the society the medical officer did not dare to neglect him, but devoted much time in driving out a long distance, with the consultant physician, so as to attend this important ex-official. As the inevitable result less influential members of the society had to wait. These institutions impose on their medical officers more work than they can possibly accomplish, and, as someone must be neglected, naturally this falls to the least influential members. Thus, in this case, the medical officer was obliged to devote many hours to visiting the ex-president, who lived in a comfortable villa situated at a considerable distance from the majority of the patients, and who could very well have afforded to pay a proper fee to a private practitioner. While the medical officer was doing this, members of the society, who were really poor men, and who were therefore entitled to medical aid on cheap club terms, could not be attended in time.

During his period of service the five children of this medical officer contracted measles of so malignant a type that three of them died. The consulting physician then summoned the whole of the committee to his house. He spoke to them in the severest terms. He explained that the house in which they had lodged their medical officer and family was unhealthy and unsuited for a dwelling. The committee listened to these reproaches very quietly and seemed to agree, saying they would see what could be done. The consulting physician, however, heard nothing more of them for a long time and was not called in for any further consultations. At last he accidentally came across one of the printed reports published by this friendly society, and there he found that his name no longer appeared as the consulting physician, but had been replaced by the name of a junior member of the profession. Thus he had been quietly set aside, and it is very probable that his successor was never told the reason why such alteration had been effected. On making further inquiries in other quarters I found that the death of these three children from malignant measles was not the first disaster of this nature which had occurred at the friendly societies' dispensary. The daughter of the previous medical officer had died from diphtheria while living there. This fatal house, I was pleased to hear, has finally been given up, and now the dispensary is located in more wholesome quarters. Many were the complaints that I heard against this institution. A lodge of Foresters, after a few years' experience, gave it up in disgust. By more than one person I have been told that the sort of practitioners who accept employment as dispensary officers for friendly societies are not unfrequently young men who have not proved their capacity, or old men who have too clearly proved their incapacity. Sometimes they are retired naval medical officers, who have acquired such a rough manner in dealing with sailors that they give offence to a civil population comprising many women and children. Other men may be able practitioners, but not as sober in their habits as might be desired. At the Birmingham friendly societies' dispensary there was one medical officer

[1] The previous articles on this subject were published in THE LANCET on the following dates: (1) Aug. 24th, 1895, Brussels; (2) Aug. 31st, 1895, Brussels; (3) Sept. 21st, 1895, Portsmouth; (4) Sept. 28th, 1895, Portsmouth; (5) Oct. 5th, 1895, Eastbourne; (6) Oct. 12th, 1895, Lincoln; (7) Oct. 26th, 1895, Lincoln; (8) Nov. 2nd, 1895, Grimsby; (9) Nov. 9th, 1895, Bexhill-on-Sea; (10) Nov. 16th, 1895, Hull; (11) Nov. 23rd, 1895, Hull; (12) Dec. 7th, 1895, York; (13) Dec. 14th, 1895, Northampton; (14) Dec. 21st, 1895, Fermanagh Medico-Ethical Association; (15) Dec. 28th, 1895, Northampton. (16) Jan. 4th, 1896, Birmingham.

who in every respect deservedly enjoyed the highest reputation, but he had a disease of the knee which prevented his undertaking ordinary practice, and he was therefore glad to accept the surgery work of the dispensary.

Some twenty years ago there was an agitation, and even a sort of strike, against the clubs and friendly societies at Birmingham. The medical officers were then paid, as a rule, only 2*s.* 6*d.* per member per annum. A declaration was signed by nearly all the members of the profession in the town that they would not replace any medical officer who had resigned on the question of pay unless the society offered 5*s.* per annum per member. Thereupon several medical officers asked for an increase and, on this being refused, resigned their posts. There were, however, one or two practitioners who marred considerably the effect of this movement. It was discovered that many of the patients went to the house of a Professor of the Medical College. When this leading member of the profession was accused of acting against the pledge taken and against the interests of the profession, he replied that he did not see the patients, it was only his son who gave them advice. Thus, while the club practitioners were endeavouring to protect themselves, they found their efforts defeated by the action of one of the leaders of the profession. Under such circumstances it was not surprising that the medical men began to give way. Nevertheless, substantial advantages were secured, and there was an all-round increase of pay. Many societies then gave 4*s.*, and some gave even 5*s.*

A Birmingham practitioner who for many years has had an extensive experience of club-work informed me that the best clubs in Birmingham were those established by the Jews and the coffee-house or restaurant waiters and assistants. They paid 5*s.* a year and had no juvenile branches. He thought that the practitioner who combined club practice with private practice had far more zest in his work, the former leading to and helping the other. Within the last few weeks he had succeeded in raising the subscription of the "United Brothers'" Medical Aid Society from 3*s.* to 4*s.* He pointed out to them that drugs were more expensive than they were formerly. Considering the increased cost of dispensing, on the one hand, and, on the other hand, the fact that the working classes were now as a rule earning higher wages, it was only fair and just to claim on behalf of the medical officers a higher scale of remuneration. These arguments were found to be unanswerable, and the "United Brothers" finally accepted their medical officers' terms and granted the 33 per cent. increase. Other societies, however, are not so liberal-minded, and to enforce reform much stronger medical organisation will be necessary than that which actually exists in Birmingham. The local branch of the British Medical Association has, it is true, recently formed an ethical section, and it is to be hoped that they will take up this matter energetically, though as yet nothing has been done. Then there is the Midland Medical Society, which meets every alternate Wednesday. This association has about 300 members, but membership is not limited to the town of Birmingham. Also the members devote their time mainly to discussing medical and surgical cases and technical papers. This, though the older society, is attended by many of the younger members of the profession—namely, by those who are most concerned in the question of club practice. The Midland Medical Society has, therefore, great interests engaged in the question of contract work and club practice. It may, therefore, be expected that this body will move in the matter; but here, again, it may be said that practically nothing has been done. Finally, there is the Queen's College, or the Mason College, Medical Society, composed of young qualified practitioners and medical students. They also meet to read and discuss technical papers and have not yet realised that medical education may consist of something else than the study of technical medical subjects: that there are the material interests of the profession, the ethical laws by which it should be governed, which also require careful investigation and thoughtful study. There is, however, in all these organisations the making of one compact and thoroughly representative medical league that would be strong enough to handle these difficult questions. Nor is there any reason why the special purpose and work of these medical societies should be altered and disturbed; but each society might, with advantage, hold special meetings to discuss medical ethics and the position of the profession in respect to the medical aid clubs and associations. Then these societies could amalgamate for that one purpose and invite all medical men who do not belong to any of these organisations to join also, in order to defend the material interests, and maintain, or it may be in some cases re-establish, the dignity and the independence of the medical profession.

A correspondent writes:—"I have read with much interest the article of your Special Commissioner headed 'The Battle of the Clubs—XV.' I do not know whether he has yet pointed out the following fact, of which he may not be aware—viz., that some of these insurance societies are not only simply transferring from one medical man to another, but they are actually selling for substantial sums, practices which other medical men have built up after several years of arduous work, and, for aught I know, they are possibly seeking excuses to get rid of their old medical officers in order not only to get the pecuniary value of what is already a marketable practice, but also to secure the services of a new medical officer, on a sufficiently permanent basis, to build up an additional saleable value when the practice is again sold. I have quite recently heard of several cases where practices have been offered by insurance societies for sale. Again, not only do some of these secretaries transfer patients to other medical officers as new members after they have got into arrears, but I have every reason to believe that they actually collect these arrears and keep them entirely for their own benefit. These facts cannot be too widely disseminated for the information of all the uninitiated. With regard to the payment of medical men in general, I do not think we have so much reason to blame the clubs and the public as we ought to blame those of our professional brethren (!) who do not lose a single opportunity of underselling their *confrères;* and the time appears to me to have more than arrived when some steps will have to be taken by the General Medical Council, or some other professional conclave, to regulate and fix the lowest fee which may be taken for some if not for all services which are rendered by medical men, such as is already the case in the law. If a minimum fee was fixed, this need not necessarily interfere with the maximum. When I tell you, Sirs, that only quite recently I heard of 'physicians and surgeons' who are not professing to be going a dispensary practice, who certainly do not keep even an open surgery, who are charging 6*d.* for certificates! and who are paying as many as three visits in a day to ordinary private patients for 1*s.*, or at the rate of 4*d.* a visit, I think it will be generally admitted that our profession could not possibly be more degraded or in a more disgraceful manner. And, personally, I may here state that I have far more respect for the man who advertises and declines to take a lower fee than 5*s.* than I have for the man who does not advertise (!) and takes the fee of 4*d.*"

TOUTING BY AGENTS.

WE have received from Dr. T. Frederick Pearse, Hon. Secretary of the Portsmouth Medical Union, the following letter and enclosure:—

"The injury done to many practitioners by the unscrupulous touting and soliciting of the agents of some of the medical aid associations for the supposed benefit of their medical representatives is not sufficiently recognised. The representative himself is 'praised up to the skies,' while every possible opponent is sneered at and 'run down.' A want of confidence in the local members of the medical profession is necessarily engendered in the public mind. These societies have little thought, in the medical attendant's interests, of the pecuniary position of their clients, except that the better they are off the more they are likely to make out of them for insurance business, and they pay the medical man only a percentage of what is collected for medical aid. No examination is required of candidates, and the medical man has very often thrust upon him many chronic invalids. As they can as quickly turn a man out of his appointment as place him into it, the medical officer is completely in their power. Such are the chief objections against these societies. The following (condensed) letter from a local manager of the Liverpool Victoria Friendly Society shows their method of business:—

"'Nov. 22nd.

"'DEAR SIR,—Having heard that you would probably undertake the duties of medical referee to this society and also the National Medical Company, Limited ..... On receipt of your reply will wait and explain

and complete your appointment, *believing as I do that a fine field lies open for your occupation. Our men would sing your praise from day to day, which means business.* Eighty per cent. of the collections after first six weeks' probation.

"Yours faithfully,

"H. H. PARKER.'

"Medical aid associations have been defined as 'associations formed as trade speculations carried on by lay proprietors for the purpose of deriving pecuniary profit from the earnings of the members of the profession, and pushed by means of advertisement or by the employment of paid canvassers, how tout and solicit the patients of other practitioners.' Considerable feeling is being aroused against societies of this description, and the Council of the Norfolk and Norwich Medico-Chirurgical Association have unanimously decided that it is unbecoming and unprofessional for any member of the profession to lend his name or to associate himself in any way with such a society. It is to be hoped that all the medical societies throughout the kingdom will take this question up and endorse this expression of opinion. We shall then, perhaps, teach the medical officers to these associations to recognise the injury that accrues to the profession by lending their assistance to such institutions."

Dr. Pearse's letter gives a very good example of the mischief that has been done in the profession by certain so-called medical aid associations in engendering ill-feeling among brethren. How can the most charitable man in the world, the most generous and the most amiable, remain unmoved while he knows that a rival's skill is being persistently puffed to his own detriment, and that the puffery is not an offensive form of honest praise, but a method of advertising a commercial business where the profits come out of the profession and go elsewhere? We have already noted with approbation[1] the action of the Council of the Norfolk and Norwich Medico-Chirurgical Association, and have recommended it to the favourable consideration of similar bodies. We are, therefore, glad to see that at the beginning of the year a resolution was moved at the Nottingham Medico-Chirurgical Society to the effect "That in the opinion of the society it is unprofessional and undignified for any medical man to accept the post of medical officer to so-called medical aid societies promoted by and for the benefit of men outside the medical profession." This was carried, and a committee was selected to consider the practical means for dealing with the subject.

SOME OF THE HOSPITALS IN NORTHERN ITALY.

(BY A HOLIDAY CORRESPONDENT.)

(Continued from p. 1072 of Vol. II., 1895.)

Male Lunatic Asylum in Venice.

FEW visitors to Venice can have passed its picturesque islands without asking what they are now used for and wondering what their past history may have been. Perhaps the island best known to the English is that which used to be a quarantine lazaretto for the plague and now belongs to a rich Order of the Catholic section of the Armenian Church. Here the Fathers are busily at work translating, printing, and disseminating books in all languages and superintending a college of young Armenians in Venice itself. Byron's poems appear in several languages, including, of course, Armenian, for it was in this very monastery that Lord Byron studied the language and liturgy of Armenia. The adjoining island to this is now called San Servolo, and on it since A.D. 1715 the priests of the Order of St. John of God have devoted themselves to the care of 600 madmen, chiefly from the province of Venezia, which pays 5*d.* a day for each of its pauper inmates. The statistics are published every five years, and I was presented with the last report, which consists chiefly of a long treatise by the superintendent on the physiology of the brain and cerebellum and on some proofs of the Darwinian theory. The tables of statistics show that during the last five years 624 admissions took place; 369 inmates went out and 278 died, besides some 600 who began and ended the quinquennial period. Of the 1241 total admissions 291 were due to pellagra, 100 to alcohol, 97 to epilepsy, 167 to simple melancholia, 78 to acute mania, and 150 to chronic mania. The pellagra patients were all peasants, mostly between twenty and sixty years of age, while the bulk of the alcoholics were young bachelor artisans. There were 29 deaths out of 40 cases of general paralysis, but by far the largest number of deaths—72—was from pellagra. The 291 cases of pellagra were all due to poverty, and in 137 cases there was a predisposing family history of pellagra, while in 148 cases the family history was unknown, and in only 6 cases was it certain that there was no question of this disease in the family. While I was waiting for permission to visit the asylum an old priest was trying to relieve a patient—a young gardener—of a troublesome tooth. But the tooth was stubborn and refused to come out after six attempts. Then came a jolly-looking young priest who had a doctor's diploma from Padua, and who showed me all I wanted to see with the greatest courtesy. He began by showing me many pictures and other works of art done by the patients, and then a very valuable collection of photographs, for every patient is photographed on admission and the clinical notes are not considered complete without it. In addition to the medical priests the asylum is visited every day by a lay physician. The priests themselves allow that it is old-fashioned and hardly comes up to modern requirements. There is no padded room and there are no camisoles. Restraint is freely used, chiefly by a leather muff for both hands, and for more serious cases by a waist belt and anklets in addition, which enable a man to be tied in bed by means of light chains. One big man had been tied in his bed in this way for twelve years! The floors are of mosaic cement, and are strewn with sawdust at night to soak up the patients' excreta! The consequence is that all the wards have a urinous odour, and the stagnant summer air reminds one of certain ill-ventilated prisons. The attendants, of whom there are sixty-eight, at my afternoon visit were lying about on forms or beds and were very slovenly dressed. I was shown several of the pellagra patients with erythematous patches on the face, hands, elbows, and feet. All had tongues denuded, or partially so, of epithelium, and non-symmetrical exaggeration of knee reflexes. Some were talking hard all the time, but were not otherwise excited. A few of the patients were of a class who paid for their maintenance, but they were apparently all treated in the same way. The space in the dormitories was 32 cubic metres for each patient. Fresh water is obtained in abundance from artesian wells 200 feet deep, for the salt water surrounding the island is only 20 feet deep. Such of the island as is not occupied by the madhouse is laid out in gardens, vineries, dairies, and poultry yards, in all of which some of the chronic patients work or pretend to work. One of the most interesting patients in the asylum was a blind albino aged twenty-four, a microcephalic idiot 4 ft. 5½ in. in height.

Female Asylum near Venice.

On another of the many islands of Venice called San Clemente the Sisters of St. Vincent and St. Paul from Milan have stationed themselves, and since 1873 have had the care of an average number of 974 lunatics. Besides 30 sisters, there are 108 female attendants between eighteen and twenty-two years of age, all untrained peasant girls unable to read and write. The medical staff consists of a resident superintendent and four visiting physicians from Venice not belonging to any religious Order. My visit was at 10 A.M., and I had hoped to have been allowed to accompany the medical round, but the superintendent declined to show himself and sent word to me by a porter that he and the other practitioners were all busy. After waiting nearly an hour I was allowed to see the wards under the escort of a very unintelligent servant. I mention this because it was the only instance of discourtesy in any Italian hospital or asylum with which I met, the colleagues elsewhere loading me with kindness. However, the sisters at San Clemente were all extremely polite and anxious to show me all they could. Their Order bears a high reputation all over the East for hospital devotion and good management. Unnecessary restraint has been abolished by the present superintendent, who would seem to be quite an enlightened man, but the most troublesome cases are handcuffed with leather and fastened to the bed by the wrists. The latrines were clean and extremely well aired by large windows where the glass has been replaced by wire and

[1] THE LANCET, Dec. 14th, 1895.

shutters. The ward floors were of mosaic cement, much better kept by some sisters than by others. They are washed every day with water, and every week or so with linseed oil. The kitchen was kept very clean, and, besides several marble tables, contained one stove twenty-six feet by seven feet. The boilers, jugs, and saucepans were all of brightly burnished copper. I saw several patients at work in the kitchen and laundry, besides others who were weaving, sewing, plaiting, and making cotton-lace or the old-fashioned bolster. Altogether there are twenty-three acres on this island farmed by the good sisters.

The Civil Hospital in Venice.

The doorway typical of Renaissance reliefs in perspective, including two lions and the achievements of St. Mark, dates from A.D. 1485, and its rich façade is well known to tourists. Since 1815 the building has been used as a hospital, and at the first visit its size rather overpowers one. I found there were 1600 beds, but only 1100 were actually in use. The largest ward is the old Chapel of St. Mark, and has a magnificent ceiling. The altar pictures and accessories still remain on a raised daïs at the east end, and four rows of beds are ranged lengthwise down the ward, and are under the charge of two physicians. I noticed three cases of enteric fever in this ward, in spite of the good water-supply of Venice; but this is not to be wondered at, for the Venetians still make use of the wells in the middle of their court-yards. Enteric fever is said to be rare among tourists, and my hotel proprietor, a German, told me that during the last twenty years no death from this disease had taken place in his hotel, though many cases had been cured there. The hospital staff numbers sixty, but there is no medical school in Venice, and therefore no students. The wards have marble floors and are not too well ventilated, in spite of their height. The latrines are primitive. Lunatics are kept here under observation only, and are then despatched to the two asylums before described. Several patients, however, in the wards devoted to nervous diseases were tied in bed and were wearing camisoles and leather hand-muffs. The physician's assistant explained to me that this was to prevent their getting out of bed or otherwise misbehaving. It is into this section that pellagra patients are admitted, and I was shown several middle-aged women suffering from this disease, two of whom were tied in bed because they were said to be excited occasionally.

Pellagra Houses at Mogliano.

The efforts of Professor Lombroso and others to arouse public attention to the evils of pellagra, which is sapping the lives of the peasants in the north of Italy, have during the last few years borne some fruit. One hour's journey by train from Venice is a farmhouse standing on thirty acres of land, the property of a benevolent society which has several aims—the cure of incipient and advanced pellagra, free milk-supply for the children of pellagrous patients, diffusion of apparatus for drying maize, ovens for bread and soup kitchens, and making a general propaganda against pellagra and the use of diseased maize. The society was formed in 1882 and has constructed suitable barracks adjoining the farm for 225 in-patients—viz., 60 sane, 130 insane, and 35 aged, all suffering from pellagra and of both sexes. Since its formation some 1500 patients have been treated, with this percentage of results: cured, 44; relieved, 40; not relieved, 5; worse, 7; incurably mad, 2; and dead, 2. Practically all the patients have come from the two provinces near Venice, which pay towards their keep 10*d.* per day for each mad patient and 5*d.* for the sane. The nursing and housekeeping are done by sisters from Vicenza, and there is an energetic young medical superintendent (Dr. E. Locatelli) in a neighbouring house who takes an enthusiastic interest in his work. The number of cases which relapse after apparent cure vary from 15 to 20 per cent. The greatest number of admissions is in March and April, when the erythema peculiar to pellagra is also best seen. The general treatment is fresh air, ablutions, a diet of milk, bread, eggs, cheese, vegetables, salt, and once a day a ration of meat and red wine. On this diet favourable cases increase in weight, 11 lb. on an average. Maize even when good is thought to be hurtful to pellagra patients. For diarrhœa, bismuth, tannic acid, and sometimes opium, and for insomnia all sedatives were employed on occasion, and the medical man told me he had special faith in faradaic electricity and massage, with arsenic, iron, or quinine. Old patients are said to require strychnine, digitalis, or caffeine in addition. Some of the peasants object to drinking milk, thinking it gives them diarrhœa, but they are encouraged to persevere till they get used to it. In the insane wards I saw some men in bed in single rooms, belted and tied hand and foot. The medical man thought it too hot during the summer to employ camisoles or other restraint, and explained that all these men had attempted to commit suicide or homicide, or both. One man was in bed dying from pellagrous diarrhœa with abolition of the knee reflex. Three patients with spastic paraplegia were said to be improving very fast, and a fourth who was walking about fairly well was said to have been paraplegic three months before. Both sane and insane had old erythematous patches with glossy atrophy of the skin on the face, nose, hands, and feet, and all had unnaturally clean tongues, and a history of diarrhœa, giddiness, backache, and cramps. Nearly all had considerable exaggeration of the knee reflex. The medical man showed me several boys, aged about twelve, the victims of hereditary pellagra. I could not, however, discover that there were any special characteristics of the hereditary tendency to the poison. Some of their heads and faces were rachitic and others syphilitic. One baby, a year old, was at the breast of a pellagrous mother who looked healthy enough otherwise. Her child had no teeth and the fontanelles were gaping wide. Perhaps the hereditary tendency to pellagra about which all Italian experts write is analogous to that which some alcoholic parents transmit to their offspring? Dr. Locatelli showed me in his office two maps of Italy which point out in a very striking way the precisely similar distribution in that country of *zea mays* (maize, Indian corn, or *gran turco*) as a food and pellagra as a disease. In the south maize is not grown and pellagra is unknown.

Ospedale Maggiore in Milan.

This is a vast brick building, half Gothic and half Renaissance in style, begun in 1457 and containing no fewer than nine courts. The central court, and of course the principal one, is eighty yards by twenty yards, and dates from the seventeenth century. The whole outside of the hospital is covered with terra-cotta, with rich window mouldings, and in the chapel are portraits of the Sforzas, the founders of the charity. This must be one of the largest hospitals in the world, for there are 3000 beds, and at my visits there were over 2000 in-patients. The staff consists of 150 medical men, and there are 100 sisters of St. Vincent and St. Paul to control the nursing. The ventilation of the wards is decidedly bad, as probably too much confidence is placed in their great height, some being thirty-three feet high. In these enormous buildings provision can be made for many sections and sub-sections. For instance, I saw five wards for incurable disease, and another ward with eleven beds which I was told was especially for gangrene; but on examining the bed tickets I found only four had gangrene, and the others had various forms of cancer. A little later I was shown two small wards divided by a gynæcological theatre, and I was told by the sister in charge that these fifteen beds were reserved for puerperal fever, but on investigation I found that this was a rare accident, and that the beds were usually filled by other sufferers in the lying-in period. However, it makes one shudder to think that in this crowded building spaces had to be devoted in times past for both gangrene and septicæmia. The surgical dressing-rooms and theatres differ very much, as the surgeons themselves are going through different periods of antiseptic evolution. One dressing-room had a tiled floor and marble cemented dado six feet high; another, like the wards, had wooden ceiling, whitewashed walls, and dirty rough tiles as flooring. But the operating-theatre near the two wards for children was of a newer order, with tiled floor, cemented walls, glass tables and cupboards, painted iron operating-table, wash-stands carefully syphon-trapped, and a stove for boiling instruments. Hanging to a window was the hose for washing down the walls, and the water escaped under the door directly into the garden without the use of any drain. It was rather painful after that to see the theatre for women, including ovariotomy, &c. Wooden cupboards and every horror of the old days, with a cemented floor full of cracks and an untrapped grating communicating directly with one of the hospital drains which runs into a neighbouring canal. Altogether I saw eight theatres, but I did not succeed in seeing the largest operating-theatre, because it was being used for examination purposes. It is said, however, to be constructed on a modern system. In one

of the courtyards patients were busy washing the iron beds, which is done twice a year. The kitchen contained one enormous stove, and all utensils were of copper, but these were very dirty in spite of the presence of four sisters and four cooks. As I passed through the male insane wards with Dr. Brera I noticed that any excitable patients were kept in leather muffs until they became so troublesome that they had to be despatched to the county lunatic asylum. The special treatment of pellagra in this hospital is by means of salt baths, and one of the courtyards is set apart for a bath to which out-patients come in great numbers. The majority of those practitioners who have devoted attention to pellagra have, however, very little faith in this being any material aid towards the cure.

MANCHESTER.

(FROM OUR OWN CORRESPONDENT.)

The Medical Society.

THE annual meeting was held on the 8th inst., Mr. F. A. Southam, the retiring president, being in the chair. At the last annual meeting many changes in the laws were adopted, the most noteworthy being the institution of a uniform yearly subscription of one guinea, instead of two guineas for town and one for country members. During the year seventy-nine new members were elected, against thirty-eight in 1894. Eight had resigned and two had died. This year begins with 349 members, as compared with 280 at the end of 1894. The library now contains 31,648 volumes, in addition to a large number of pamphlets, 258 volumes having been added during the year. Dr. Glascott, the treasurer, was in the happy position of stating that the society had a balance at the bank of £79 19*s.* 8*d.*, showing a net profit of £29. Dr. Ashby was appointed president. A movement has arisen in favour of providing a central medical hall, where the various societies can hold their meetings and professional gatherings can take place. The Medical Society, with its extensive library, and the Pathological Society have for many years been indebted for hospitality to the Owens College, but the rest have to engage rooms at one or other of the hotels, and this inconvenience is shared by various scientific and literary bodies. A committee has been formed to further this project, and in answer to the request that two members should be nominated to represent the Medical Society officially, the president and honorary secretary have consented to serve. The undertaking is an arduous one and will require all that combined effort can do to make it a success.

The Sale of Poisons.

A letter appeared in the Manchester papers the other day from a druggist in Bury, in which he complains of "the distorted notions that coroners have of the duties of chemists." It was called forth by the report of an inquest at Preston on the body of a man who had taken four-pennyworth of laudanum. He sent his son, a boy aged nine, four separate times on a Saturday night to the same shop for a pennyworth of laudanum. The druggist served him once and his assistant three times. It was given in an open glass to this child of nine to carry to his father. The druggist said he took the precaution to label the glass "poison," and told the boy to be careful, that it was poison, "and I thought that was sufficient." The jury brought in a verdict of "Death by Misadventure," although in her evidence the widow said "she had never known her husband to be in the habit of taking opiates, but he had threatened to do away with himself." The druggist was told by the coroner that "the jury were unanimously of opinion that he ought not to supply laudanum in an open glass, especially to young children," and the coroner added that it was most reprehensible. With this most people will agree; but the Bury druggist is very angry, and says "chemists as a body take more care than the State demands," and blames the coroner for his observations and for not discussing the question with the druggist. "The law," he says, "does not say that poisons shall not be served to children or in glasses," and if it is wrong complaint should lie at the door of Parliament. The opinions of an individual druggist may not be of great moment, except as indications of a widespread feeling. No doubt the majority do take every care in the sale of poisons, and, if need be, go beyond the strict requirements of the law and make use of some common sense. The purchase of a poison should always lead to caution on the part of the seller, and it is a preposterous thing that anyone should seem to defend the selling of four distinct quantities of laudanum to a child aged nine. The writer of the letter says, what is probably true, that "carbolic acid causes more deaths than any other poison." It can be purchased in any sort of vessel, in any quantity, and from anyone who chooses to sell it, "without label and without warning," but he does not remember anyone being censured, though if it were scheduled "some unlucky chemist would draw down the wrath of some coroner." It is to be hoped that the absence of all sense of moral responsibility shown by the writer, who has the courage or absence of feeling to sign his name, which, however, it is a charity not to make more public, does not characterise very many of his fellow tradesmen. He seems to think there is ill-feeling towards druggists, and hopes medical men are not the cause of it. If his views are widely held the feeling he deprecates may come to exist, but will not be confined to our profession.

Habitual Drunkenness: the Festive Season.

Another illustration of our inability to deal effectually with these wretched cases was exhibited the other day at the Salford Police-court, where a woman made her 154th appearance charged with being drunk and disorderly. There was, however, nothing dejected or miserable in her bearing, for "she stepped jauntily into the dock with a polite curtsey, and wished Mr. Makinson 'A happy New Year to your worship.'" She was sent to gaol for a month—an utterly useless proceeding. On the morning after New Year's Day there was an unusually long list of "drunk and disorderly" cases at the Manchester police-courts. Two courts were held, in one of which eighty cases were heard, and in nearly all the same story was told—New Year's Day—too much drink—taken to the police-station. It is not much to be wondered at that Mr. Smelt, the deputy city coroner, recently stated that the business of his court increased 50 per cent. during Christmas and New Year's weeks. All this indicates an unsatisfactory mode of celebrating the birth of Christ and the beginning of a new year.

Cruelty to Children.

Scarcely a day passes without the eye catching one or more paragraphs with the above heading as one glances over the daily papers. Whether affection for children is becoming less as we advance in civilisation, or that cases of cruelty are more looked after and more frequently detected than of old—which does not seem quite consistent with the former supposition—facts show that much suffering is inflicted which is a disgrace to our species. During December last the Manchester Branch of the National Society for the Prevention of Cruelty to Children investigated sixty-six cases of cruelty. Six persons were prosecuted and convicted, and thirty-nine warning notices were served. In nine cases the decisions are pending, and the remainder were otherwise dealt with. These cases affected the welfare of 143 children, 56 of whom were insured for £269.

Salford Sewage Again.

The scheme of the Corporation was brought before Judge Parry at the Manchester County-court on Friday last, and approved by him. The matter is to be brought before him again in three months that progress may be reported. The Corporation will apply to the Local Government Board for borrowing powers for £40,000. In the meantime there is great difference of opinion as to the extent of the filtration area required. At the last meeting of the Council Dr. Quine moved an amendment to the effect that the area should be increased to 33,000 square yards, and added that £60,000 should be borrowed. Alderman Walmsley, the chairman of the committee dealing with the matter, who formally moved the adoption of the scheme, as it was necessary to appear before Judge Parry with a scheme which, however, could be amended afterwards, said that according to the calculation of the chemist of the London County Council they would want 60,000 square yards. Mr. Corbett, the engineer, considers 20,640 square yards sufficient; a resolution was adopted giving discretionary power to increase it by 4000 square yards. Dr. Quine's amendment, which was lost, would have given 33,000 square yards. Alderman Walmsley, backed by the London County Council expert, would have 60,000. It will be interesting to see how the plan adopted works out in actual practice if the time-honoured good intentions of Salford are eventually carried out.

Jan. 14th.

SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

The Royal Medical Society, Edinburgh.

DR. CLOUSTON'S address to the Royal Medical Society, which had been postponed owing to his illness, was delivered on Friday of last week. Taking as his subject the Mental and Nervous Element in Disease, Dr. Clouston emphasised the importance to students and practitioners of getting hold of the general principles that underlie and explained the facts they had learned in their student days. He wished to impress on his audience that night the principle that, in the consideration and treatment of almost all diseases and injuries, the influences travelling to and from the brain cortex must be taken into account. In illustrating these influences he reminded his audience how it often happened that through an injury to a limb the action of the brain was disturbed, and, on the other hand, how the brain disturbance might so influence the nutrition of the body as to retard the process of repair in the injured limb. Every disease, injury, and disordered function was influenced one way or the other by the action of the brain, and it was not so much the striking examples of this that they were to keep in mind as the constant way in which every disorder was thus influenced—seen, for example, in the effect a merry heart and cheerful impressions have in hastening and helping forward a favourable termination to any disease. Dr. Clouston referred to Professor Laycock as having been one of the first to point out the influence of the brain in disease and placed him in the front rank of those who had done work in this direction. He went on to show the importance in disease of physiognomonical diagnosis or the study of outward appearances, these appearances being reflexly produced through the brain cortex. He mentioned influenza as a fever in which the brain cells were primarily attacked, and pointed out the necessity of reference to the nervous relationships for the proper treatment of the disease. Dr. Clouston then drew the attention of his audience to the lowered condition of the brain in the night as compared with the day. Fevers, pain, and mental disorders were aggravated at night, and it was at night that death usually occurred. Lastly, he remarked on the discovery by modern physiologists of the actual apparatus in the cortex by which the brain could be acted on from every part of the body and could itself act on every organ and every other part.

Edinburgh and Leith Hospital Question.

The decision of the Leith Dean of Guild Court against the erection of a hospital at Quarryholes, which has been frequently referred to in these columns, has been before the judges in the Court of Session. They have reversed the decision of the Dean of Guild Court, and find Leith liable in expenses.

Glasgow Medical Societies.

At the meeting of the Medico-Chirurgical Society, on the 10th inst., Dr. W. L. Reid showed a large Uric Acid Calculus which he had removed by vaginal cystotomy; the size of the stone was so considerable that it had been necessary to split the perineum in order to extract it. Dr. James A. Adams reported a number of cases upon which he had performed the operation of Shortening the Uterine Round Ligaments for Retroflexion or Prolapse of the Uterus; the results had been uniformly good. Dr. Lawrence Oliphant submitted an extensive Slough of the Bladder-wall which had been discharged after a protracted labour; microscopic examination showed that in places the exfoliated tissue extended to the peritoneal coat; the patient had made a good recovery and regained considerable control over the function of the bladder. Dr. T. K. Monro showed a Liver with a rudimentary left lobe; and Dr. Bell Todd a photograph of a case of Ectopy of the Liver, Omentum, and Bladder taken from a child, who survived fifteen days. At the Pathological and Clinical Society, on the 13th inst., Dr. Knox read notes of a case of Actinomycosis of the Face and Neck, and showed photographs of the patient, together with specimens of the fungus and tissues involved. In spite of very free repeated scraping of the diseased area and thorough trial of the iodine treatment the patient died nine months after the original swelling had appeared on the mucous surface of the cheek. Dr. Finlayson showed a cretin who had for two years been treated by thyroid extract, with marked improvement both in the physical and mental condition. Dr. Alex. Robertson submitted two cases—(1) a patient with Disease of the Floor of the Fourth Ventricle; and (2) a case of Workman's Neuritis.

Glasgow Infirmaries.

The directors are able to announce a donation of £3500 by an anonymous donor towards the erection of the new surgical theatres. This is the third sum of like amount which has been presented to the infirmary within the past month, so that the directors are in a position to meet the contemplated expenditure and to proceed with the erection of the three new theatres recommended by the staff. A pathetic accident has recently occurred at the Royal Infirmary, one of the nurses taking a quantity of carbolic acid in mistake for syrup of lemon; she died of shock in the course of about twenty minutes.

Glasgow Philosophical Society.

At a meeting of this society on the 8th inst. Professor W. Ramsay delivered a lecture on Argon and Helion. Professor Ramsay is well known in professional circles at Glasgow, having at one time been assistant to the professor of chemistry in the university. For this and other reasons his lecture attracted many representatives of the profession. The chair was taken by the newly-elected President, Dr. Ebenezer Duncan.

Glasgow University.

Dr. Maitland Ramsay has been reappointed Lecturer on Diseases of the Eye at Queen Margaret College.

Jan. 14th.

IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

The Water-supply of Belfast.

THE several reservoirs available for the supply of water to the city of Belfast are at present all well filled, there being a larger supply than at the corresponding period of last year. At the end of the year 1894 the average daily consumption of water was nine and three-quarter million gallons, while the present-day consumption is nine and a quarter million gallons, which shows a reduction in favour of the present rate of consumption of nearly 500,000 gallons per day, and this is including the new supplies of water for all purposes during the past year. With the total water at present in store, and at the present rate of consumption, there are 237 days' supply now available The storage supply at Lough Morne and at Stoneyford is increased. The number of houses supplied with water greatly exceeds the number supplied in former years.

County Monaghan Infirmary.

It is understood that the net balance from the recent bazaar for the new infirmary is £1591 18*s*. The work at the new building is making substantial progress.

Death of Mr. Robert H. Newett, L.R.C.P. & S. Edin.

One of the most highly respected medical practitioners in the neighbourhood of Belfast has just passed away in the person of Mr. Newett of Ligoniel. He obtained the licence of the Edinburgh College of Physicians in 1867, while he had qualified in the College of Surgeons of the same city in 1862. He then obtained a dispensary appointment in county Mayo, but, after holding it for twelve months, he was elected house surgeon in the Fever Hospital of the Belfast Workhouse. He held this post for a few years and then became house surgeon in the Royal Hospital, an office he filled for a considerable time, until, in 1868, he was appointed dispensary medical officer at Ligoniel, a position which he continued to occupy until the time of his death. For a long time he had been in poor health, and died on Jan. 9th. Mr. Newett was a man of the most sterling uprightness and honourable character. With a sound knowledge of his profession, most conscientious in the discharge of his duties, and sympathetic in his manner, he was a very great favourite in the district in which he resided. He was buried on Jan. 13th.

Drum Dispensary District.

Mr. Swann, who for the past ten years has been dispensary practitioner at Newtownhamilton, was on Jan. 6th elected, by a majority of two votes, medical officer of the Drum dispensary district of the Cootehill Union.

Coleraine Cottage Hospital.

At the annual meeting of the supporters of this excellent charity, held on Jan. 13th, it appears, from the report presented, that 71 cases (36 medical and 35 surgical) had been admitted, and that 12 operations (all successful) had been performed. There had been only three deaths. The treasurer's statement showed that the expenditure had exceeded the income by £37.

Enteric Fever in Dublin Barracks.

Considerable uneasiness exists in Dublin on account of the persistent rumours as to the prevalence of enteric fever in the military barracks of the city and the neighbourhood. The policy of reticence adopted by the military authorities and their refusal to permit independent sanitary investigation have produced an unfavourable impression in the public mind. Island-bridge and Richmond Barracks are said to have suffered most.

Jan. 14th.

PARIS.

(FROM OUR OWN CORRESPONDENT.)

What is Chlorosis?

IN a suggestive article appearing in the *Gazette Hebdomadaire* (Jan. 2nd) M. Charrin gives as the cause of that peculiar condition, chlorosis, menstrual auto-intoxication. It is known that on the eve of the menstrual flow the serum-toxicity is increased. Wet-nurses who continue to menstruate are the cause of these menstrual periods of diarrhœa and divers eruptions in their sucklings, whilst they themselves are, at these times, particularly prone to suffer from fever, herpes, headache, and muscular pains. Directly the flow is established these disorders cease. Experimental researches conducted by M. Carnot (a son of the late regretted President Carnot) and M. Charrin tend to show that the auto-intoxication theory is the correct one. The purifying influence of the menstrual flow is an old idea, but its connexion with chlorosis had, so far as I know, not been hitherto suggested. Imperfect cell development, due to hereditary scrofula, &c., makes itself felt in the genital system, and the increased metabolism coincident with puberty throws a greater strain on this system, the eliminatory insufficiency of which is then demonstrated by the condition which we denominate chlorosis. Abnormal narrowness of arteries, such as the mesenteric and pulmonary conduce still further to the retention of noxious materials in the blood. But, after all, only direct experimentation with menstrual blood can settle the question, and it is, therefore, to be hoped that MM. Charrin and Carnot will pursue their researches in this direction and publish the results.

Theobromine as a Diuretic in Cardiac and Renal Diseases.

For the last two years M. Huchard[1] has made extensive use of theobromine as a diuretic in the above-named diseases, and he has come to the conclusion that it is, as a diuretic, superior to digitalis and caffeine. Its prolonged administration involves no inconvenience, provided that the daily dose does not exceed 5 grammes, and more especially if this quantity be given in fractional doses of 50 centigrammes. Exceptionally it may, however, even in smaller doses, cause severe headache. Nausea and vomiting are rare, as is also cerebral excitement. Once only did the exhibition of the drug cause albuminuria, and in three instances only was previously existing albuminuria increased by it. In these latter cases the increased albuminuria coincided with rapid disappearance of the œdema. M. Huchard prescribes the theobromine after the following plan: 1st day, 3 grammes in fractional doses of 50 centigrammes (in cachets); 2nd day, 4 grammes in eight cachets; and 3rd day, 5 grammes in ten cachets. This latter dose is continued for three or four days. In certain cardiac diseases he prolongs the diuretic action by the administration (consecutively) of half or one milligramme of digitalin given in one day. Theobromine is a direct diuretic, its action being to induce a heightened activity of the renal epithelium. Its employment is particularly indicated in arterial cardiopathies, in those complicated with renal lesions, in hyposystole (heart failure), and in interstitial nephritis. The simultaneous exhibition of digitalis, caffeine, or lactose does not increase its diuretic action. Theobromine diuresis is not prolonged after three or four days after the last dose given. The drug is not cumulative or toxic; it succeeds often when digitalin or caffeine have failed; and it has apparently been of use in typhoid fever and pneumonia, where a free secretion of urine is of importance.

[1] Société Thérapeutique, Jan. 8th.

The Country Practitioner in France.

The President of the French Chamber of Deputies, when announcing the loss that assembly had sustained by the death of Dr. Ernest Leroy, deputy for the Somme, took advantage of the occasion to pay a graceful and well-merited compliment to the members of the medical fraternity who exercise their profession in the provinces. The following translation of M. Brisson's eulogy will doubtless be of interest to all British practitioners, whether urban or provincial, albeit they themselves are not overburdened with similar laudation: "Our excellent colleague belonged to that portion of the medical corps whose duty lies in our rural districts, and whose devotion and disinterestedness are everywhere far above all praise. Obliged to minister promptly to the requirements of the most complicated cases, constrained to be at all times everything to everybody, these modest doctors amass treasures of experience, and unfold stores of goodness, which suffice to stamp the country practitioner as a type of all that is most elevated and interesting in human nature. They one and all are in constant contact with extremes of misery and suffering whereof we know little or nothing."

Jan. 14th.

BERLIN.

(FROM OUR OWN CORRESPONDENT.)

Photography through Opaque Screens.

COMMUNICATIONS made last week to the Verein für Innere Medicin and the Physical Society have caused an extraordinary sensation, not only throughout the medical profession, but also in every department of the scientific world. Professor Roentgen of Würzburg, in Bavaria, has discovered that the beams of light produced by passing an electric current through a vacuum tube are able to penetrate media which are opaque to ordinary light, and he has in this way succeeded in photographing objects which were covered by various opaque solids, such as a wooden board, or a closed book containing a thousand pages. Metal and some other substances proved to be less transparent to these rays than wood and paper are, but no screen was found to be totally impermeable to the light of a vacuum tube, so that it is now possible, for instance, to photograph the bones of a living person's hand through the surrounding soft tissues, and photographs of this kind were shown at the meetings of the above societies. Professor Roentgen has in this way obtained photographs even when the box containing the photographic glass plate was closed. It is the general opinion that the new discovery will produce quite a revolution in the present methods of examining the interior of the human body.

The Medical Directory.

Börner's Medical Directory for 1896, edited by Dr. Schwalbe, shows that there are now 23,099 medical men in Germany, the numbers having been 22,287 in 1894, 19,630 in 1891, and 16,864 in 1887. Since last year the numerical increase has therefore been 812, or 3·6 per cent., and during the last eight years the increase has been 6235, or 37 per cent., whereas the increment of the general population has been only 12 per cent. in the same space of time. There are 13,778 medical men in Prussia, 2559 in Bavaria, 784 in Würtemberg, 1711 in Saxony, 862 in Baden, and 661 in Alsace-Lorraine, the remainder being in the smaller States of the Confederation. The directory states that there are 1978 medical men at present in Berlin, but this number does not include the practitioners in the suburbs of the city. The increase of the medical profession in Berlin exceeds its average increase throughout the empire, for the number has risen by not less than 580 practitioners (= 41 per cent.) since 1889, whereas the addition to the population of the city is only 9 per cent. Munich has 435 medical men, Breslau 355, Leipzig 337, Hamburg 460, Frankfort 233, and Strassburg 220. There is now an average of 4·55 medical men for every 10,000 inhabitants, but in Berlin the proportion is as high as 12·59. There are 1071 registered dentists and 5144 pharmacies. The Medical Practitioners' Association

has 249 branches, with 14,270 members; there are 96 scientific societies, 15 societies for the discussion of questions relating to public health, and 13 societies of army medical officers. The 20 medical faculties have 263 teachers and 8361 students. The largest numbers of medical students are in Berlin, Munich, Leipzig, and Würzburg. The overcrowding of the profession and the extension of the club system have had the effect of making medical practice much less lucrative than formerly.

Laparotomy in Tuberculous Peritonitis.

Professor Israel has contributed to the *Deutsche Medicinische Wochenschrift* a paper on Some Cases of Tuberculous Peritonitis cured by Simple Laparotomy, and expresses the opinion that as our knowledge of the conditions of healing under these circumstances is very limited it is desirable that every new observation should be published. Laparotomy for this disease has seldom to be performed in childhood, but of Professor Israel's cases three were those of children who were operated on at a somewhat early stage. The local affection was very extensive, and all the patients were feverish, but the ascites was very slight. The laparotomy was performed in the usual way; after the opening of the abdominal cavity a quantity of iodoform oil was thrown into it. The time elapsed since recovery has been, for the three cases, fourteen, sixteen, and seven months respectively. The first patient was a boy four years of age, in whom the tuberculous peritonitis had taken origin from a tuberculous ulcer in the colon; the intestines were partially matted together, and the omentum was rolled up like a curtain. A fistula which appeared a fortnight after the operation healed under the application of tincture of iodine. In the second case the disease progressed rapidly, with high fever and severe abdominal pain, and on opening the abdomen the mesentery and the peritoneum were found to be covered with tumours of the size of a cherry-stone. After the operation the temperature became nearly normal, but the boy did not improve, and there was a recurrence of diarrhœa together with enlargement of the abdomen, so that thirty-six days after the first operation a second laparotomy was performed and Professor Israel was greatly surprised to see that all the tumours had disappeared. The boy thereupon quickly recovered and increased in weight considerably. In the third case, also, the child recovered quickly, although he suffered from pleurisy and tuberculous infiltration of the right apex. Professor Israel concludes (1) that the disappearance of tuberculous peritonitis cannot be explained by the removal of the ascites, as in these three successful cases there was hardly any ascites; (2) that laparotomy may be followed by recovery even when the peritonitis is combined with intestinal ulceration; (3) that tuberculous tumours of the size of a cherry-stone may disappear within thirty-six days; and (4) that hectic fever does not contraindicate the operation, as some French surgeons suppose. The fourth case was that of a young woman aged twenty years, who had suffered from abdominal pains since her thirteenth year. Symptoms of ileus had appeared, and a tumour could be felt in the right side of the abdomen. A surgeon performed laparotomy and found at the cæcum a tumour of the size of an apple with swelling of the mesenteric glands and matting of the intestines. Believing the disease to be carcinoma, he closed the abdominal wound without removing the tumour, and the ileus disappeared, but the patient remained very weak. A year afterwards Professor Israel was consulted, and, being of opinion that the case was not one of carcinoma, he performed a second laparotomy and found the peritoneum to be covered with tubercles. The tumour grew from the posterior wall of the colon and partly closed its lumen. To avoid ileus he made an anastomosis between the ileum and the colon, but abstained from extirpation. Since the operation the patient has regained good health; but what makes the case especially interesting is the fact that the tumour, which was undoubtedly of tuberculous nature, became smaller and smaller, until at present it is only the size of a walnut.

Jan. 14th.

ROME.

(FROM OUR OWN CORRESPONDENT.)

The War in Abyssinia.

CONCURRENTLY with the despatch of reinforcements to the seat of war the Army Medical Department is proportionally represented. The Croce Rossa Italiana, which has now four stations in the Colonia Eritrea (to say nothing of the infirmaries in connexion with it at the various garrison towns), forms an effective auxiliary to that department, differing as it does, in a military sense, from the Red Cross Society elsewhere. The Geneva Convention is not recognised in the colony, so that all the *personnel* at the four stations referred to—the strictly professional staff as well as the lay assistants—are provided with firearms, the medical officers with revolvers, and their servants with Wetterly rifles. Any day we may now read of the active intervention of the Red Cross, the encounters on the 7th inst. between the Shoan skirmishers and the Italian outposts at Makallé being but the prelude to an engagement which must become general. The present disposition of the service is as follows. On the Asmara heights Dr. G. Del Prete, medical head of the Red Cross in the "Eritrea," directs the "ospedaletto da montagna" (mountain hospital), having under him Dr. De Ferrari (pharmacist) and the Cavaliere G. Badini (commissary), with the relative *personnel*. At Adi Ugri Dr. Muzzioli presides over the garrison infirmary and the "posto di medicazione" in connexion with it. At Saganriti Dr. Goffredo Spinelli conducts another hospital of the kind, replacing the army medical officer now on duty in the field. At Adigrat there is a fourth station—the "ambulanza di montagna," fully equipped and with the necessary *personnel* under Dr. Giuseppe Quattrociocchi. The other two ambulances (Nos. 2 and 3) will be told off to positions selected by General Baratieri, whose experience of the Red Cross service in Abyssinia has been so favourable as quite to explain the active countenance it receives from the War Office. At Massowah it commands rich stores of *matériel*, entrusted to the Marquess Oreglia di Santo Stefano, who represents the central committee of the Red Cross in the "Eritrea." Meanwhile contributions of money, medicines, and comforts are pouring in, not from Italy only, but from the Italian settlements in South America—notably Buenos Ayres and Santa Fé.

Sero-therapy at Naples.

The Neapolitan school was one of the first in Italy to recognise the new weapon afforded in practice by sero-therapy, but till now had taken no steps to provide itself with an establishment for the supply of the serum. The defect is already in course of being made good, a committee, with the Senator Spinelli for president, having raised funds to take over the Istituto Vaccinogeno and adapt it for the purpose desiderated. A better building and site could not have been devised.

Professor Gaetano Mazzoni.

King Humbert has, *proprio motu*, conferred on Dr. Gaetano Mazzoni, Professor of Clinical Surgery and Lecturer on Special Pathology in our university, the badge of Cavaliere of SS. Maurizio e Lazzaro in recognition of His Majesty's appreciation of his recent work entitled "Neutralità dei Feriti in Guerra" ("Neutrality of the Wounded in War").

Jan. 11th.

EGYPT.

(FROM OUR OWN CORRESPONDENT.)

Cholera.

DURING the last fortnight there have been in all Egypt 15 new cases admitted as in-patients to, and 14 deaths reported outside, the hospitals, besides 12 deaths in hospitals. There are thus still about two cases every day, and they come now from three villages quite in the interior. But there have also been two cases at Alexandria, the first of which was fatal, and the second is now said to be convalescing after being treated with some of Behring's anti-cholera serum. Cholera continues to be absent from the villages where it broke out in October and November, but the same sanitary precautions are still being taken, and Dr. Rogers Pasha is himself inspecting the suspicious haunts in Lower Egypt.

Small-pox.

The existence of variola excites no comment, but as a matter of fact there are 73 cases now being treated, as compared to 20 cases of cholera. The disease is nearly confined to four of the six provinces of Lower Egypt, but altogether there are cases reported from twenty-one villages. "Fièvre typhique," by which is meant probably typhus or

relapsing fever, is reported from five villages, but there are only 24 cases in all.

The Tourist Season.

Some of the hotels are fuller than they have ever been before, but two or three of them are less gay than last January. During December nearly 1300 European visitors reached Cairo, being slightly in excess of the number which arrived in December, 1894.

Cairo, Jan. 8th.

Obituary.

JAMES DIXON, F.R.C.S.

MANY of the senior members of the profession will hear with regret of the decease of Mr. Dixon, who many years ago held a distinguished position among London ophthalmic surgeons. He studied medicine at St. Thomas's Hospital and received his qualification as M.R.C.S. in 1836. In course of time he became assistant surgeon to St. Thomas's, devoted himself specially to ophthalmic surgery, in which he attained an extensive practice, and was for a long time consulting surgeon to the Royal London Ophthalmic Hospital. The third edition of his Guide to the Practical Study of Diseases of the Eye appeared in 1866. In 1870 domestic bereavement induced him to resign his practice, and to live in retirement at Dorking. The study of English literature and history was thenceforward his chief pursuit, and he died at his residence Harrowlands, Dorking, in his eighty-second year. He became a Fellow of the Royal College of Surgeons of England in 1843. Mr. Dixon contributed an article on Diseases of the Eye to Holmes's System of Surgery.

Medical News.

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentlemen passed the Second Examination of the Board in the subjects indicated:—

On Monday, Jan. 13th:

Anatomy and Physiology.—Albert Ernest Hamerton, John Blake Hall, and Cuthbert George Catterall, students, Yorkshire College, Leeds; James Ainscow, Owens College, Manchester; Harold George Webster and Thomas Danily Paddock, University College, Liverpool; Ralph Evelyn Drake-Brockman, St. George's Hospital; William James Lord, University College, Bristol; Arthur John Stanley and George Valentine Smallwood, Mason College, Birmingham; Arthur Ricketts, University College, London; Percy Foster, Charing-cross Hospital; Vincent Thomas Clare Bent, Guy's Hospital; and Joseph Marcus Garman, London Hospital.

Anatomy only.—Herbert Lancaster Laidman, Owens College, Manchester; Vernon Kent Blackburn, Firth College, Sheffield; William Hodgson Park, Charing Cross Hospital; and Guy Berners Nicholson, St. Bartholomew's Hospital.

Physiology only.—Edgar Whalley, Yorkshire College, Leeds; Edwin Garrett Bunbury, University College, Bristol; Henry Spinks, Owens College, Manchester; Edward Smyth Crispin, King's College, London; John Edmund Francis and John William Cheese, University College, London; Robert Stanley Ransome, St. Thomas's Hospital; and Geoffrey Stuart Moore, London Hospital.

Fifteen gentlemen were referred in both subjects, 6 in Anatomy only, and 2 in Physiology only.

On Tuesday, Jan. 14th:

Anatomy and Physiology.—Edward Alban Evans, Ernest Archibald Longhurst, Edward Reginald Row, and Lawrence Humphrey, Guy's Hospital; John Frederick Walker, Edward Young, and David Jones Thomas, London Hospital; William Evans, Otago University and London Hospital; Herbert Ewan Waller and Aleck Lauriston Scott, St. Bartholomew's Hospital; William Ferris, George Patrick Thomson Groube, and Charles Henry Straton, St. Mary's Hospital; Richard Le Geyte Worsley, St. George's Hospital; Arthur Cheney, Melbourne University and King's College, London; Ernest Castleigh Bailey, King's College, London; John Kitton Howlett, Cambridge University; and Alfred Campbell, Sydney and Edinburgh Universities.

Anatomy only.—Benjamin Isaac, Guy's Hospital; John Herbert Yearsly, St. Thomas's Hospital; William Walton Claridge, Middlesex Hospital; and Walter Green, Charing-cross Hospital.

Physiology only.—William Ernest Nelson, Cambridge University and St. Thomas's Hospital; Arthur James Bowman Adams, St. Thomas's Hospital and Mr. Cooke's School of Anatomy and Physiology; Austin William Powell and George Mintur Brown, Guy's Hospital; and William Moore Bell Sparks, King's College Hospital.

Ten gentlemen were referred in both subjects, 6 in Anatomy only, and 2 in Physiology only.

The following gentlemen passed the Second Examination of the Board in the subjects indicated on Wednesday, Jan. 14th:—

Anatomy and Physiology.—George Herbert Spencer, John Davies, Kenneth Harrington Douglas, and Sidney Gaster, London Hospital; Charles Seymour Strickland Dunlop, University College, London; Edward Percy Hughes Dudley, Hubert Peché Lobb, and John Elliot Robinson, St. Bartholomew's Hospital; Norman Pern, St. Thomas Hospital; Samuel Henry Gilbert Cory, St. Mary's Hospital; Ralph Michell, Walter Silverwood Richardson, and Arthur Allan Miller, Guy's Hospital; Albert William Dunning-Hunt, Henry James Viney, Middlesex Hospital; and John Matthew Lefevre, McGill University, Montreal, Canada.

Anatomy only.—Arthur Henry McNeill Mitchell and Percy Bertram Spurgin, St. Mary's Hospital.

Physiology only.—Arthur Hawkins, Cambridge University and St. Bartholomew's Hospital.

Seventeen gentlemen were referred in both subjects, one in Anatomy and two in Physiology only.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentleman, having previously passed the necessary examinations, and having now attained the legal age of twenty-five years, was, at the quarterly meeting of the Council on Thursday, the 9th inst., admitted a Fellow of the College:—

Haines, John William, M.B., L.R.C.P. Lond., St. Bartholomew's Hospital (diploma of Member, July 30th, 1894).

The following gentleman, having previously passed the necessary examinations, and having now conformed to the by-laws and regulations, was admitted a Member of the College:—

Moorshead, Charles Woollven, L.S.A. Lond., Guy's Hospital.

A NEW SANATORIUM AT WORTHING.—The corporation of Worthing has just succeeded in acquiring upon very easy terms a large house on the South Downs as a sanatorium. It is four miles from the borough and on the southern slope, facing the Channel, and, without any alteration, it at once became available for the patients, who have since been removed from the hospital tents. No loan has been necessary, for the building has been secured by the coöperation of the council's bankers and some members of that body, who have advanced the money at about 3 per cent. and are leasing it on such terms that within a few years it will become the absolute property of the town. Dr. Charles Kelly, medical officer of the county of West Sussex, has been appointed medical superintendent of the hospital, but a medical officer has not yet been nominated. Negotiations are in progress with regard to the admission of Poor-law patients from the borough, for whom there will be ample accommodation.

SMALL-POX ISOLATION AT SOUTHAMPTON.—The health committee of the Southampton corporation has had to meet a rather awkward contingency. Some days before Christmas the medical officer reported to them that both the West Quay Hospital and the hospital ship were full of scarlet fever cases, and should small-pox occur they were totally unprepared for its isolation. As a matter of fact, a case was reported on board an incoming vessel, but on the medical officer visiting the ship he was told that the patient, a third-class emigrant, had been landed at Lisbon. The town had to pay heavily in 1893 in precisely similar conditions, a small-pox epidemic resulting from the want of isolation, and so efforts were at once put forth to secure outside temporary accommodation for the fever convalescents, so that the ship might be placed at the disposition of the authorities in case of need. These efforts were, however, fruitless, and about a fortnight later a case of small-pox was notified. The steward of the vessel referred to above had gone home apparently in the best of health, but in a fortnight fell ill with the disease, and there was nowhere for him to be taken. So the whole of the nursing staff was turned out of the land hospital and lodged in a furnished house in the town; the convalescents from the ship were moved into the staff quarters ashore, and the vessel, after thorough disinfection, was utilised for the reception of the case of small-pox. This met the needs of the emergency, and the committee are now engaged in negotiating for a site suitable for a new isolation hospital. One has been offered for £1200, and it is expected that the hospital will cost about £20,000. At the committee meeting at which these matters were discussed several members, including Mr. Eliot (who referred to it as "inadequate and monstrously bad"), alleged that the West Quay Hospital was quite unsuited to the needs of the district. It is proposed, when the new building is available, to hold the ship in reserve, primarily with a view to the reception of small-pox cases from abroad, which could then be accommodated without touching land.

LITERARY INTELLIGENCE.—The "American Year Book of Medicine," edited by Dr. George M. Gould, of Philadelphia, which was announced as ready for delivery in the States on Jan. 1st, can be ordered from the Rebman Publishing Company, Limited, 11, Adam-street, Strand, who are, and will be in future years, the English agents for the publication of this work.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—A quarterly court of the directors of this society was held on Jan. 8th at 8.30 P.M., Dr. Pollock in the chair. Three new members were elected and the deaths of five reported. There were no fresh applications for grants. It was resolved that a sum of £1162 be distributed among the fifty-one widows, the eight orphans, and the four orphans on the Copeland Fund. The expenses of the quarter were £76. The Christmas present, £462, had been given on Dec. 20th. A further sum of £500 had been received from the executors of Miss Carpue, making in all £3000.

ROYAL METEOROLOGICAL SOCIETY.—The annual meeting of this society was held on Wednesday evening, the 15th inst., at the Institution of Civil Engineers, Mr. R. Inwards, F.R.H.S., President, in the chair. The report of the council showed that the society was in a satisfactory condition, thirty-four new Fellows having been elected during the year. Mr. Inwards devoted his presidential address to the subject of Meteorological Observatories, which he illustrated with numerous lantern slides. After describing some ancient observatories, including the Nilometers and the Tower of the Winds at Athens, he gave an account of national observatories, of which the Royal Observatory, Greenwich, was taken as a type. Mr. E. Mawley, F.R.H.S., was elected President for the ensuing year.

THE DIFFUSION OF SMALL-POX.—There was an increase of fatal cases of small-pox last week in and around London, the metropolitan area and West Ham contributing three registered deaths from the disease. No deaths were registered in either of these areas during the preceding week, the first of the current registration year. In the last three months of the year just ended there were 12 deaths registered in the county of London, 1 in the northern, 3 in the eastern, and 8 in the southern groups of sanitary areas. As regards notified attacks, there were in the four weeks ending Dec. 28th in the whole of London 33, as compared with 36 in the like immediately preceding period. Only some 8 notifications per week have thus been recorded. The district of Greenwich is credited with 11 of the total 33 cases, and 6 were from as many separate sanitary areas. In the thirteen four-weekly periods of 1895 beginning with January the notifications of small-pox in London, duplicate entries of the same case not being excluded, were severally 35, 67, 47, 35, 40, 22, 88, 287, 236, 108, 42, 36, and 33, the total for the year being 1076. The heaviest period was in the three months of August, September, and October, the notifications in the twelve weeks comprised in these months being 631. Since October the disease has shown a continued decline month by month. Last week the admissions to the hospitals of the Metropolitan Asylums Board numbered 20, but it should be remembered that cases from West Ham are being now treated in the ships, as well as London cases proper. That the disease is not altogether eradicated may be seen from the fact that on Tuesday of last week there were 4 new cases recorded. The patients remaining under treatment on Saturday last were 66, a fall of 2 on the total of the preceding Saturday. In West Ham there were 10 new cases in the fortnight ending Jan. 4th. The condition of the streets where the attacks arose has been again exercising the attention of the town council. At Southampton, on Sunday last, a meeting of the health committee was convened by reason of a case of small-pox which was isolated on the floating hospital, the fever patients therein being removed ashore. At Oldham in the last two weeks of 1895 there were 4 cases of small-pox reported, as against 1 in the preceding two weeks. The Saddleworth rural district council have had before them the alleged spread of small-pox from the old Moscow hospital of the Oldham corporation, and have expressed their view that patients should no longer be sent there. On account of development of the disease near the hospital in question the Runninghall Hospital has been got ready for the reception of one of the cases. The Neath board of guardians have been in correspondence with the town of Aberdare as to a pauper case of small-pox, for whose maintenance in the town hospital the urban council desired the guardians should pay. In other parts of South Wales tramps seem to have been busy in disseminating small-pox, especially from Newport as a centre. In Newport itself, at Dowlais, and at Bridgend the disease has appeared as a result of vagrant-spread infection. At Merthyr Tydvil last week a tramp ill with small-pox was admitted to the workhouse, having come from Aberdare, and the authorities of the latter place have been advised to look carefully to their common lodging-houses. In Dublin during the last week of the old year, for the first time since the serious epidemic of small-pox began, no fresh cases were reported. In the succeeding week there was only one case.

THE EASTBOURNE WATER-SUPPLY.—The corporation of Eastbourne some time ago, after discussing certain reports on the water supplied by the water company, decided to promote a Bill in Parliament for the establishment of municipal waterworks. Excess of chlorides was the chief complaint against the present water-supply, and negotiations with the company proved somewhat unsuccessful, the chairman of the directors, the Duke of Devonshire, declining to meet a deputation from the council to consider the matter. Last week a vote was taken on the proposal to promote the Bill referred to. The voting was on the plural system, the maximum being twelve—six as owner and six as occupier. Out of 5167 papers only 3627 were good. The result showed a majority of 225 votes against the corporation, the figures being 3752 against the Bill and 3527 for it. Calculating on the "one man one vote" system, however, there was a majority of 219 for the council's proposed action.

PRESENTATIONS TO MEDICAL MEN.—At a meeting of the Bangor city council on Wednesday, the 8th inst., the ex-mayor, Alderman Robert Langford Jones, M.R.C.S. Eng., and the ex-mayoress were presented with a silver cradle to commemorate the birth of a daughter during their year of mayoralty. In addition to the members of the council there were present a large number of ladies and gentlemen. The presentation, which has been subscribed for by the members of the council and the citizens generally, is a beautiful work of art, and the production of Messrs. Elkington and Co., Church-street, Liverpool. Dr. R. Wilson has received a dressing-case and walking-stick from the members of the Glasgow College Station ambulance class in recognition of his courtesy and efficiency as lecturer to the class.—Mr. Arthur H. Hoffman, L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been the recipient, on his approaching departure from Humsbough-on-Tyne, of a handsome drawing-room clock, in recognition of his able instruction on "first aid" to the Local Ambulance classes.

BOOKS, ETC., RECEIVED.

BAILLIÈRE, TINDALL, AND COX, King William-street, Strand, London.
The Journal of Microscopy and Natural Science. Editor, A. Allen. Vol. V., Third Series. Vol. XIV., Old Series. 1895. pp. 456.

CASSELL AND CO., London.
The Year-Book of Treatment for 1896: a Critical Review for Practitioners of Medicine and Surgery. pp. 476.

CHURCHILL, J. & A., New Burlington-street, London, S.W.
History of the Cholera Controversy, with Directions for the Treatment of the Disease. By Sir Geo. Johnson, M.D. Lond., F.R.C.P., F.R.S. 1896. pp. 78. Price 3s.

CHURCH OF ENGLAND TEMPERANCE PUBLICATION DEPÔT, 4, Sanctuary, Westminster, S.W.
The Effects of Alcohol upon the Internal Organs. By Drs. L. Revilliod and P. Buiet. Translated by W. F. Law, M.D., F.R.C.S. With Anatomical Diagrams.

KEGAN PAUL, TRENCH, AND CO., Charing-cross-road, London.
Handbook of the Diagnosis and Treatment of Skin Diseases. By A. V. Harlingen, Ph.B. Yale, M.D. Third Edition. Illustrated. 1895. pp. 577. Price 12s.
Manual of Gynæcology. By H. T. Byford, M.D. Illustrated. 1895. pp. 488. Price 10s. 6d. net.

LEA BROTHERS AND CO., Philadelphia.
System of Surgery. Edited by F. S. Dennis, M.D., assisted by J. S. Billings, M.D. Vol. III. Illustrated. 1895.

LONGMANS, GREEN, AND CO., London.
Quain's Elements of Anatomy. Edited by E. A. Schäfer, F.R.S., and George D. Thane. In Three Vols. Vol. III. Part 4. Illustrated. Tenth Edition. 1896. pp. 364. Price 16s.

The Diseases of Children, Medical and Surgical. By H. Ashby, M.D. Lond., F.R.C.P., and G. A. Wright, B.A., M.B. Oxon., F.R.C.S. Eng. Third Edition. 1896. pp. 814. Price 25s.

MACMILLAN AND Co., London.

The International Encyclopædia of Surgery. Edited by John Ashhurst, jun., M.D., LL.D. Illustrated. In Seven Vols. Vol. VII. (supplementary volume). 1895. Price 31s. 6d.

PENTLAND, YOUNG J., Edinburgh and London.

Pediatrics: the Hygienic and Medical Treatment of Children. By Thos. M. Rotch, M.D. Illustrated. Vols. I. and II. 1896.

Traumatic Infection. Hunterian Lectures. By Chas. B. Lockwood, F.R.C.S. 1896. pp. 138.

THE NEW SYDENHAM SOCIETY, London.

An Atlas of Illustrations of Pathology, compiled chiefly from original sources for the New Sydenham Society. Fasciculus 10: Diseases of the Testis. Part 2, with Plates. 1895. (Agent: H. K. Lewis, Gower-street, London, W.C.)

THE REBMAN PUBLISHING COMPANY, Adam-street, Strand, London.

A Pictorial Atlas of Skin Diseases, from Models in the Museum of the Saint Louis Hospital, Paris. Edited by J. J. Pringle, M.B., F.R.C.P. Lond. 1895. Part 2. Price 10s. 6d.

THE SCIENTIFIC PRESS, 428, Strand, London, W.C.

The Nurse's Dictionary of Medical Terms and Nursing Treatment. By Honor Morten. Third Edition.

Brain: a Journal of Neurology; edited for the Neurological Society of London by A. de Watteville; winter, 1895 (Macmillan and Co., London); price 7s.—The Middlesex Hospital, W., Reports of the Medical, Surgical, and Pathological Registrars for the year 1894 (H. K. Lewis, London, W.C.); price 2s. 6d. net.—The Humanitarian; January, 1896 (Hutchinson and Co., London); price 6d.—Wright's new Improved Chart-holder: for Hospital Use and for Private Practice (J. Wright and Co., Bristol).—The Sanitary Record Diary, 1896 (Sanitary Publishing Company, Fetter-lane, London, E.C.)—The Local Government Annual: an Official Directory for 1896; fifth year of publication ("The Local Government Journal" Office, Dorset-street, Fleet-street, London, E.C.); price 1s. 6d.—Facultad de Medicina y Cirujia; Tesis de Doctorado por M. Cabrera (San Salvador, 1895).

Appointments.

Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET *Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week for publication in the next number.*

ANNINGSON, B., M.D. Cantab., M.R.C.S., has been reappointed Medical Officer of Health by the Cambridge Town Council.

BARKER, GORDON CAMPBELL, M.A. Camb., M.D. Brux., L.R.C.P. Lond., M.R.C.S. Eng., has been appointed Honorary Physician to the Brighton and Hove Dispensary.

DARLEY, ALFRED R., M.D., B.Ch. Dubl., has been appointed Medical Officer of Health for the Daventry Rural District, vice William John Franklin Churchouse.

DESPARD, Miss R. C., M.B. Lond., has been appointed a Junior Assistant Medical Officer at the Holloway Sanatorium Hospital for the Insane, Virginia Water, vice Emily Dove.

GARRAD, F. W., M.B., B.C. Cantab., has been appointed House Surgeon to the Warneford and South Warwickshire Hospital, Leamington.

GILES, H. O'H., M.B., Ch.B. Adel., has been appointed Health Officer for the Wyndham Shire, Victoria, Australia, vice Heard, resigned.

HENRY, G. G. W., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health by the Minehead Urban District Council.

HIGGS, W. A., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer for the Castlecombe Sanitary District of the Chippenham Union.

HOLDEN, J. S., M.D. Irel., L.R.C.S. Edin., has been appointed Medical Officer of Health by the Belchamp and Melford Rural District Council.

HOLLINGS, H. T., L.R.C.P., L.R.C.S. Edin., L.F.P.S. Glasg., has been appointed Medical Officer for the Holme-on-Spalding Moor Sanitary District of the Howden Union.

JOHNSTONE, WALTER E., M.A., M.B, C.M. Edin., has been appointed House Surgeon to the Darlington Hospital and Dispensary.

MANBY, EDWARD PETRONELL, M.D., D.P.H. Camb., has been appointed Assistant Medical Officer of Health for Liverpool.

MARTINE, W. R., M.B. Edin., C.M., has been appointed Medical Officer and Vaccinator to the Athelstaneford Parish Council, Haddington, and Medical Officer and Vaccinator to the Morham Parish Council, Haddington.

MORCOM, A., L.R.C.S., L.M. Edin., has been appointed Medical Officer by the Dunstable Town Council.

PHILLIPS, JOSIAH N., L.R.C.P. Lond., M.R.C.S., has been appointed Medical Officer of Health for the Cannock Rural Sanitary District, vice J. C. Blackford, resigned.

PORTER WM. S., M.D. Durh., L.R.C.P. Lond., M.R.C.S., has been appointed Examiner of Lunatics by the Sheffield City Magistrates, vice A. Jackson, deceased.

REID, GEO. M., M.B., Ch.M. Aberd., has been appointed Health Officer for the Heytesbury Shire, Victoria, Australia.

STRANGE, A., L.R.C.P. Lond., M.R.C.S., has been appointed Assistant Medical Officer for the Infirmary of the Whitechapel Union.

WILLS, CHAS., M.R.C.S., has been appointed Medical Officer of Health by the Blyth and Cuckney, Clown, and Kiveton Park Rural District Council.

Vacancies.

For further information regarding each vacancy reference should be made to the advertisement (see Index).

BOOTLE BOROUGH HOSPITAL.—Senior House Surgeon. Salary £80 per annum, with board, washing, &c.

BRADFORD INFIRMARY.—Dispensary Surgeon. Salary £100 per annum, with board and residence.

CHILDREN'S HOSPITAL, Nottingham.—House Surgeon (non-resident) for six months. Salary at the rate of £100 per annum.

CITY ASYLUM, Birmingham.—Resident Clinical Assistant. Board and residence provided.

DORSET COUNTY HOSPITAL, Dorchester.—House Surgeon, unmarried, to reside and board in the hospital. Salary £70.

DUNDEE ROYAL LUNATIC ASYLUM.—Resident Clinical Assistant. Board and residence provided. Applications to Dr. Rorie, Westgreen House, Dundee.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway, N.—Junior House Surgeon. Board, lodging, and laundry provided in the hospital.

GROSVENOR HOSPITAL FOR WOMEN AND CHILDREN, Vincent-square, Westminster.—Assistant Physician.

LONDON HOSPITAL, Mile-end, E.—Two Assistant Anæsthetists for six months. Salary at the rate of £50 a year each.

MIDDLESEX HOSPITAL MEDICAL SCHOOL, Cleveland-street, W.—Lecturer on Anatomy, and a Lecturer on Physiology.

NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (ALBANY MEMORIAL), Queen-squre, Bloomsbury, W.C.—Assistant Physician.

NORTH STAFFORDSHIRE INFIRMARY AND EYE HOSPITAL, Hartshill, Stoke-upon-Trent.—Assistant House Surgeon for six months. Board, apartments, and washing provided.

PARISH OF LIVERPOOL.—Assistant Medical Officer for the Workhouse, Brownlow-hill, unmarried. Salary £80 per annum, with rations, an additional sum of £20 being allowed for examining applicants for out-door relief. To reside within the workhouse in the apartments provided for him. Applications to the Vestry Clerk, Parish Offices, Brownlow-hill.

ST. THOMAS'S HOSPITAL, Westminster-bridge.—Junior Anæsthetists.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN, Marylebone-road, N.W.—Surgeon to the Out-Department.

TOWER HAMLETS' DISPENSARY.—Resident Medical Officer. Salary £120 per annum, furnished rooms, coals, gas, and attendance. Applications to the Secretary, Tower Hamlets Dispensary, White Horse-street, Stepney, E.

WEST LONDON HOSPITAL, Hammersmith-road, W.—Assistant Physician.

Births, Marriages, and Deaths.

BIRTHS.

ANDREWS.—On Jan. 10th, at 3, Chelsea Embankment, the widow of Launcelot Andrews, M.D. Lond., late of 22, Cheyne-gardens, of a daughter, who lived only a short time.

BOWKER.—On Jan. 7th, at Cwmbrau House, Newport, Mon., the wife of C. Stanser Bowker, L.R.C.P. Edin., of a son.

HOWELL.—On Jan. 13th, at Middlesbrough-on-Tees, the wife of R. Edw. Howell, M.B. Edin., M.R.C.S., L.R.C.P., of a daughter.

MOLSON.—On Jan. 7th, at Lingfield-road, Wimbledon, the wife of J. Cavendish Molson, L.R.C.P. Lond., of a daughter.

OLIVE.—On Jan. 7th, at Leamington, the wife of Eustace J. P. Olive, M.A., M.D. Cantab., F.R.C.S., of twin daughters.

SANDERS.—On Jan. 9th, at Châlet St. Vincent, Cannes, the wife of Gordon Sanders, M.B., F.R.C.P. Edin., of a son.

VOELCKER.—On Jan. 8th, at Harley-street, the wife of Arthur F. Voelcker, M.D., of a daughter.

MARRIAGES.

CLARK—MATTHEWS.—On Jan. 8th, at St. Paul's, New Beckenham, Arthur Desborough Clark, L.R.C.S., L.R.C.P. Edin., son of the late Thomas Clark, of Lauriston, Beckenham, to Annie Rutherford, only daughter of George Kelly Matthews, St. John's Lodge, Beckenham, Kent.

COATES—FREELAND.—On Jan. 11th, at the Cathedral, Chichester, by the Very Reverend the Dean, William Coates, M.R.C.S., L.R.C.P., Ingleside, Whalley Range, Manchester, to Leonora Stilwell, sixth daughter of the late Frederic John Freeland and of Mrs. Freeland, Chichester.

MARSHALL—JAMES.—On Jan. 15th, at St. Stephen's, Redditch, by the Rev. Canon Newton, assisted by the Rev. R. Hall, M.A., William Lawrence Wright Marshall of Huddersfield, elder son of the Rev. T. L. Marshall of London, to Catherine Elsie, youngest daughter of C. B. James, Esq., of Oaklands, Redditch, Worcestershire.

NIAS—DAYRELL.—On Jan. 8th, at St. Jude's Church, South Kensington, Joseph Baldwin Nias, M.D. Oxon., eldest son of the late Admiral Sir Joseph Nias, K.C.B., to Frances Miriam Clare, second daughter of Captain Edmund Dayrell, R.N.

SHAW—LORD.—On Jan. 8th, at Hove Parish Church, George Shaw, M.B. Lond., of The Drive, Hove, to Annie Louise, third daughter of C. W. Lord, Esq., of The Drive, late of Acton Hall, Sudbury.

DEATHS.

TUPPEN.—On Jan. 9th, at Nagasaki, West Cliff-road, W., Bournemouth, Harry Stacey Tuppen, M.A., M.B. Camb., aged 32 years.

WATTS.—On Jan. 7th, Robert George Watts, M.A., M.D. St. And., Albion House, Quadrant-road, Canonbury, aged 62 years.

N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.

Medical Diary for the ensuing Week.

OPERATIONS.

METROPOLITAN HOSPITALS.

MONDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (1 P.M.), St. Mark's (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.).

TUESDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1.30 P.M.), St. Mark's (2 30 P.M.), Cancer (2 P.M.).

WEDNESDAY.—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.).

THURSDAY.—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (2 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.).

FRIDAY.—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.).

SATURDAY.—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), Cancer (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

SOCIETIES.

MONDAY.—SOCIETY OF ARTS.—8 P.M. Dr. J. A. Fleming: Alternate Current Transformers. (Cantor Lecture.)

TUESDAY.—PATHOLOGICAL SOCIETY OF LONDON.—Papers:—Messrs. Kanthack and Stephens: The Escape of Diphtheria Bacilli into the Blood and Tissues.—Mr. Raymond Johnson: Extensive Hæmorhage due to Pyogenic Organisms.—Dr. Pye Smith: (1) Syphilitic Arteritis of the Ascending Aorta; (2) Cancer of Colon associated with Membranous Colitis.—Dr. Pitt: Epithelioma in an Œsophageal Pouch. Card Specimens:—Mr. Richard Lake: Urinary Calculi from an Ox.—Dr. Rolleston: Metastatic Growth in Breast.

WEDNESDAY.—DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND.—5 P.M. Cases by Drs. Stowers, Abraham, Walsh, and others. Dr. Eddowes: Warts of the Feet.

HUNTERIAN SOCIETY.—8 P.M. Clinical Evening. Sir Hugh Beevor: Hemiplegic Tremor.—Dr. Fred. J. Smith: (1) Hemianopsia; (2) Motor Aphasia.—Mr. Wm. Ettles: Cuticular Disease for Diagnosis.—Dr. J. F. Woods: Cervical Neuralgia treated by Suggestion without Hypnotic Sleep. And other cases.

SOCIETY OF ARTS.—8 P.M. Mr. Frank W. Grierson: Supply of Sea-water to London.

FRIDAY.—CLINICAL SOCIETY OF LONDON.—Dr. A. Wilson: A Girl after Meningitis in Hystero-epileptic state with Dual Existence.—Dr. Norman Dalton: Myopathic Muscular Atrophy in an Adult.—Mr. J. R. Lunn: Suppuration of the Shoulder-joint in a Man aged sixty-three, Twice Incised Excision of the Temporo-maxillary Joint for Arthritis Deformans, Charcot's Disease of Shoulder-joint.—Mr. H. Paterson: A Case of Extensive Skin Grafting.—Mr. H. B. Robinson: Birth Injury to Upper Extremity of Femur.—Mr. C. Mansell Moullin: Impaired Growth of Lower Epiphysis of Tibia consequent on a Strain.—Mr. Raymond Johnson: Case of Traumatic Orbital Aneurysm.

LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

TUESDAY.—ROYAL INSTITUTION.—3 P.M. Prof. Charles Stewart: The External Covering of Plants and Animals, its Structure and Functions.

WEDNESDAY.—NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC (Bloomsbury).—3 P.M. Lecture by Dr. Beevor.

HOSPITAL FOR CONSUMPTION, &c. (Brompton).—4 P.M. Dr. Maguire: Aortic Disease.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—5 P.M. Dr. Morgan Dockrell: Diseases of Sweat Glands.

THURSDAY.—ROYAL INSTITUTION.—3 P.M. Mr. Philip H. Wicksteed: Dante.

FRIDAY.—ROYAL INSTITUTION.—9 P.M. Prof. Burdon Sanderson: Ludwig and Vitalism.

SATURDAY.—ROYAL INSTITUTION.—3 P.M. Mr. Walter R. Lawrence: The Valley of Kashmir.

ST. JOHN'S HOSPITAL FOR DISEASES OF THE SKIN (Leicester-square, W.C.).—5 P.M. Dr. Morgan Dockrell: Pityriasis Rubra Pilaris.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET Office, Jan. 16th, 1896.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb	Wet Bulb.	Solar Radiation in Vacuo	Maximum Temp. in Shade.	Min. Temp	Rainfall.	Remarks at 8.30 A.M.
Jan. 10	30·80	N.	37	36	42	41	35	...	Cloudy
,, 11	30·64	N.E.	41	40	48	45	37	0·04	Raining
,, 12	30·41	W.	40	38	44	42	38	...	Cloudy
,, 13	29·94	N.W.	40	39	61	49	39	0·02	Cloudy
,, 14	29·50	N.W.	49	47	50	50	40	0·07	Cloudy
,, 15	29·55	W.	46	45	61	53	38	0·09	Overcast
,, 16	29·97	W.	41	39	67	48	39	0·06	Cloudy

Notes, Short Comments, and Answers to Correspondents.

EDITORIAL NOTICE.

IT is most important that communications relating to the Editorial business of THE LANCET should be addressed *exclusively* "TO THE EDITORS," and not in any case to any gentleman who may be supposed to be connected with the Editorial staff. It is urgently necessary that attention be given to this notice.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

Lectures, original articles, and reports should be written on one side of the paper only.

Letters, whether intended for insertion or for private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe or recommend practitioners.

Local papers containing reports or news paragraphs should be marked and addressed "To the Sub-Editor."

Letters relating to the publication, sale, and advertising departments of THE LANCET *should be addressed "To the Manager."*

We cannot undertake to return MSS. not used.

MANAGER'S NOTICES.

THE INDEX TO THE LANCET.

THE Index for the second half-yearly volume for 1895 was given in the issue of Dec. 28th. The practice of supplying loose copies has been discontinued, the Index having been placed in the centre of the journal, whence it can easily be detached, and placed either at the beginning or at the end of the volume.

VOLUMES AND CASES.

VOLUMES for the second half of the year 1895 are now ready. Bound in cloth, gilt lettered, price 18*s*.

Cases for binding the half-year's numbers are also ready. Cloth, gilt lettered, price 2*s*.

To be obtained on application to the Manager, accompanied by remittance.

LAY MISUSE OF PROFESSIONAL LANGUAGE.

THIS is a subject on which the late Sir Thomas Watson was equally instructive and amusing, as readers of his classical "Practice of Physics" can readily recall. That there is still occasion for his pleasant animadversions on the theme is suggested to us in a quarter where we least expected to find it—the prose writings of that purist in English style, the late Mr. R. L. Stevenson. At p. 265 of his "Vailima Letters" we read, "The influenza appears to become endemic here; but it has always been a scourge in the islands." If, as he knew it to be, influenza was "always a scourge in the islands," then the disease did not apparently "become," but actually was, "endemic." Perhaps he meant to say influenza appears to become "epidemic," while it has really been "endemic"—a quite intelligible distinction.

DRUGGISTS ACTING AS MEDICAL MEN.

AT Preston the coroner, Mr. J. Parker, has held an inquest on the body of Mary Ellen Winstanley, aged thirty-nine years, wife of John Winstanley, landlord of the Brickmakers' Arms, who was found post mortem to have died from pneumonia without having received medical attention. She was ill for a week, and the husband sent for a druggist, who called to see her repeatedly. The coroner pointed out that there was a custom in the town of people not duly qualified going out of their way to act as professional men. He asked the druggist whether he knew he was liable to penalties. The druggist maintained he had only charged for medicines and advised that if the patient were worse a medical man should be sent for. The coroner intimated that in his opinion, if the patient had had proper medical advice, she might have recovered. A verdict of "Death from natural causes" was nevertheless passed. The case should be taken up by the Apothecaries' Society. It is shocking to think that in a town like Preston a woman should be ill a week suffering from pneumonia and be attended only by a druggist.

Mr. W. Hughes.—The two preparations mentioned hardly permit of strict comparison in regard to their composition; one is an extract containing meat extractives and some meat fibre, a food and a stimulant, while the other is a meat juice expressed in the cold and consequently contains meat albumin in an unaltered state. The latter preparation turns solid on heating, due to coagulation of albumin, which, as Professor Burney Yeo says, no other class of alimentary substance can adequately replace in sustaining the vital processes.

J. H. N.—In THE LANCET of Dec. 22nd, 1883, some details are quoted from Dr. Voisin of Paris of cases which have recovered after a submersion of five minutes. So far as we know, this is the longest period of *complete submersion* after which a person has recovered.

SACCHARIN AND RHEUMATISM.

To the Editors of THE LANCET.

SIRS,—Does the use of saccharin induce rheumatism? Knowing from personal experience that if I indulged in the use of sugar rheumatism surely followed, but not expecting the same result from saccharin, I lately for about ten successive days took one tabloid in my coffee. I was disappointed, however, by finding that my right arm was partly disabled from rheumatism in the shoulder, exactly as I had found was the case after the use of sugar.

I am, Sirs, yours faithfully,

Taunton, Jan. 13th, 1896. W. M. KELLY, M.D. Edin.

*** Experiments made by Dr. T. Stevenson and Dr. L. C. Wooldridge (*vide* THE LANCET of Nov. 17th, 1888) led them to the following conclusions:—"1. Saccharin is quite innocuous when taken in quantities largely exceeding what would be taken in any ordinary dietary. 2. Saccharin does not interfere with or impede the digestive processes when taken in any practicable quantity. 3. Our personal experience is that saccharin may be taken for an extended period without interfering with the digestive and other bodily functions. Hence there is no reason to think that its continued use is in any way harmful." Again, Dr. Macnaughton Jones, in a letter in THE LANCET of Feb. 2nd, 1889, said that he had never known any injurious effects to follow its exhibition, though he had had several patients who had substituted it for sugar.—ED. L.

ON Wednesday last an action was brought in the Whitechapel County Court against a dentist to recover the sum of £2 10*s.* paid to him for artificial teeth alleged to be of an inferior quality. All the evidence (which included testimony from the house surgeon of the Dental Hospital) went to show that the plaintiff was originally satisfied with the treatment she had received. She was complaining, in Judge Bacon's opinion, because teeth bought in January broke in October as the result of an accident, and he held that she could not recover the sum paid, and that the dentist had done his work in a proper manner.

The East Dulwich Provident Dispensary.—We have received a communication with regard to this institution which is too vague for publication.

THE LATE JOHN SAVAGE AND NEW ZEALAND.

To the Editors of THE LANCET.

SIRS,—Can you or any of your readers give me any information regarding Mr. John Savage, surgeon, and corresponding member of the Royal Jennerian Society, who in 1807 published a book entitled "Some Account of New Zealand, &c."? Probably the Transactions of the Society may give the desired information, but I have no knowledge of them.

I am, Sirs, yours truly,

Dunedin, N.Z., Oct. 3rd, 1895. T. M. HOCKEN.

FAITH HEALING IN COLORADO.

A CURIOUS example of faith healing reaches us from far Colorado—the home, amongst other noxious things, of the notorious beetle. A cobbler of Denver, whose name has not transpired—as the picturesque reporters say—having heard a celestial voice enjoining him to quit his apron and stall and go forth in order to qualify himself for the healing of the faithful, proceeded alone several days' journey, barefooted and hatless, into the desert, where he remained, without shelter or food, for a hundred days. Equipped for his mission in such an unexceptionable manner, the whilom patcher of shoes returned to his native city, though not to his former abode therein, and forthwith set up as a curer of all the diseases under the sun. The method adopted by this latest specimen of the latter-day saint is as uncomplicated as the training undergone might lead an ordinary person to surmise. He simply grasps the hand of the patient, presses it firmly, and with upturned eyes exclaims, "Have faith, and you will be cured!" The results obtained are, as usual, said to be marvellous. Dozens of the most desperate cases have been permanently cured, and hundreds of people afflicted in every conceivable way are daily flocking into Denver to have their hands squeezed. It is only fair to add that the ex-cobbler makes no charge whatever. He exacts no fees and accepts no presents of any description. How he manages to live is therefore a profound mystery, since his fasting was limited to 100 days. The wonderful success attendant on this patcher is, of course, described as a terrible blow to the medical faculty; but there is another, and a far greater, sufferer from loss of prestige—the ancient and oft-quoted adage, "Ne sutor ultra crepidam," can never again hold up its head.

C. de B. B.—We never recommend individual practitioners. Our correspondent should consult his regular medical man as to the necessity for further advice and the person from whom it should be sought.

Æsculap, who has omitted to enclose his address, and whose name cannot be traced by us in our list of correspondents, is requested to point out to us privately where the publicity occurred.

T. D. H.—"A Manual of Public Health," by A. Wynter Blyth, M.R.C.S. London: Macmillan and Co., 1890.

BLEEDING IN CATTLE.

To the Editors of THE LANCET.

SIRS,—It has occurred to me that the advantages of phlebotomy are somewhat overlooked. Some time ago a Texan cattle manager told me that when they had an animal that did not thrive they bled it to faintness. It generally throve immediately and became fat. I remember a wound of the deep arch in a little, puny, scrofulous boy. The lad was completely blanched by repeated and severe hæmorrhage, but soon after the healing of the wound his constitution underwent a complete change. The enlarged cervical glands and hypertrophied tonsils disappeared, and from a peevish, irritable nuisance he became quite a fat, robust, active, and genial little fellow. Thinking that these facts may interest some readers, I am, Sirs, yours faithfully,

South Norwood, Jan. 14th, 1896. J. G. CARRUTHERS.

WANTED, A HOME FOR A DIPSOMANIAC.

To the Editors of THE LANCET.

SIRS,—I should be much obliged if any of your readers could inform me of any institution that would receive a male patient who is a confirmed dipsomaniac, and whose income is only £80 a year, where he can be kept from stimulants. The patient, who has been a great expense and constant worry to his relatives, is about forty-four years of age and has excellent health. I am, Sirs, your obedient servant,

Jan. 13th, 1896. M.D.

During the week marked copies of the following newspapers have been received:—*Bradford Observer, Jersey Express, Galignani Messenger, Scarborough Gazette, Sanitary Record, Brighton Gazette, Wolverhampton Chronicle, South Wales Daily News, North Star, Pullin's Kent Argus, Leicester Daily Post, Northern Whig, Manchester Courier, Islington Gazette, Irish Times, Birmingham Gazette, Sussex Daily News, Pioneer Mail, Architect, City Press, Times of India, Leeds Mercury, Builder, Rochdale Observer, Scotsman, Yorkshire Post, Bury Guard, The London, Liverpool Daily Post, Kent Herald, Bristol Mercury, Worcester Herald, Family Doctor, Dundee Advertiser, Huddersfield Examiner, Rotheeay Express, Mining Journal, Reading Mercury, Local Government Chronicle, Batley and Birstall News, Hertfordshire Mercury, Borough of Marylebone Mercury, Hemel Hempstead Gazette, Folkestone Express, West Middlesex Standard, Derby and Derbyshire Gazette, Weekly Free Press and Aberdeen Herald, Surrey Advertiser, Dover Standard, Gloucestershire Chronicle, Dewsbury District News, Local Government Journal, Hawick Express, Devon County Standard, Christian News, Australian Medical Journal, General Advertiser (Dublin), Le Courrier de la Presse, Brighton Standard, Hampshire Advertiser, Uxbridge Gazette, Northern Guardian, Alloa Advertiser, Somerset County Gazette, West London Press, Devon and Exeter Gazette, &c., &c.*

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